

FIGURE 1

005460-1111550

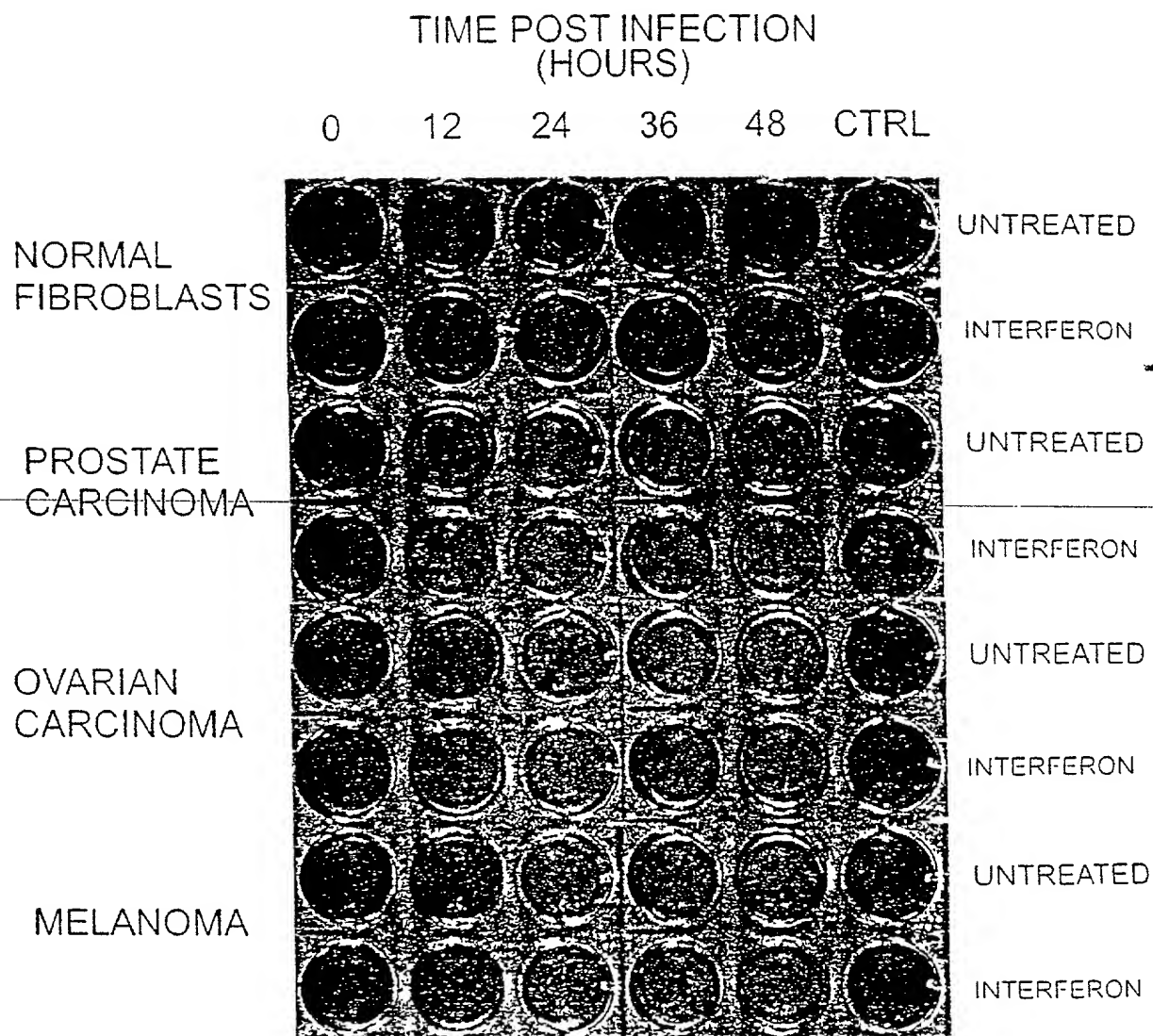
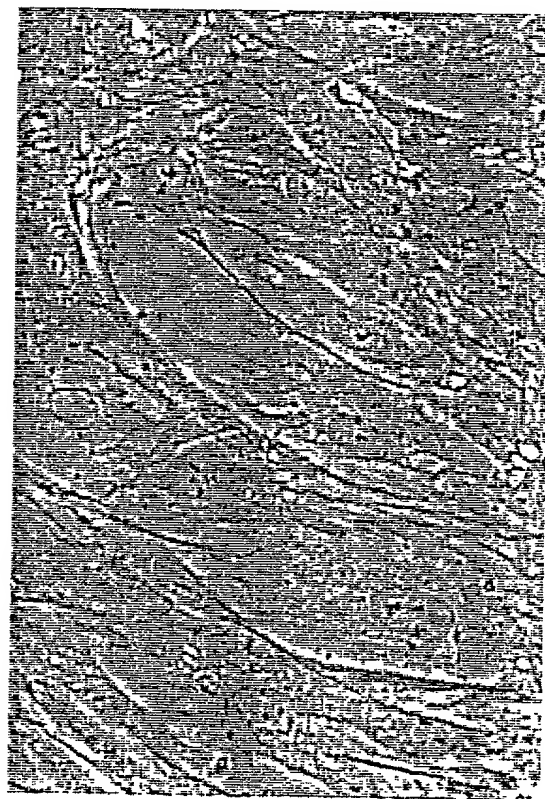
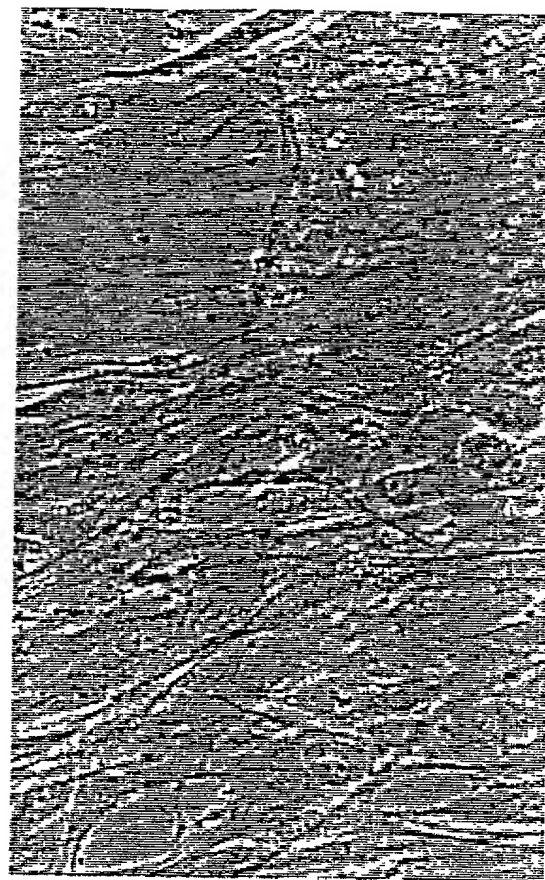


FIGURE 2

VSV INFECTION OF NORMAL HUMAN FIBROBLASTS



MOCK INFECTED



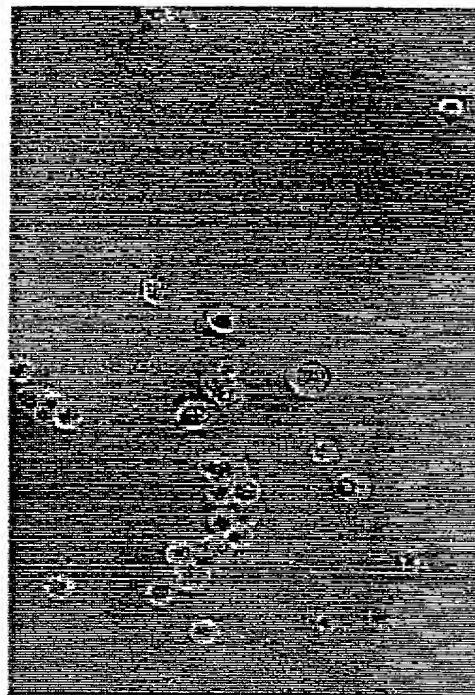
VSV MOI 1 PFU/18
HOURS

FIGURE 3A

VSV INFECTION OF OVCAR433



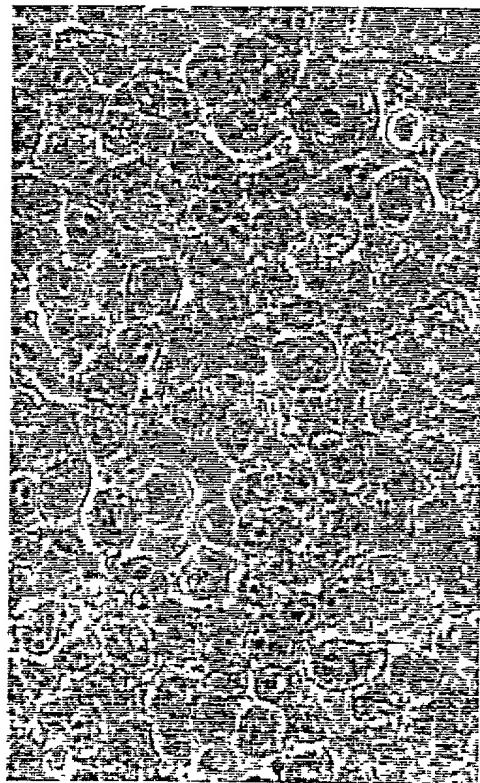
MOCK INFECTED



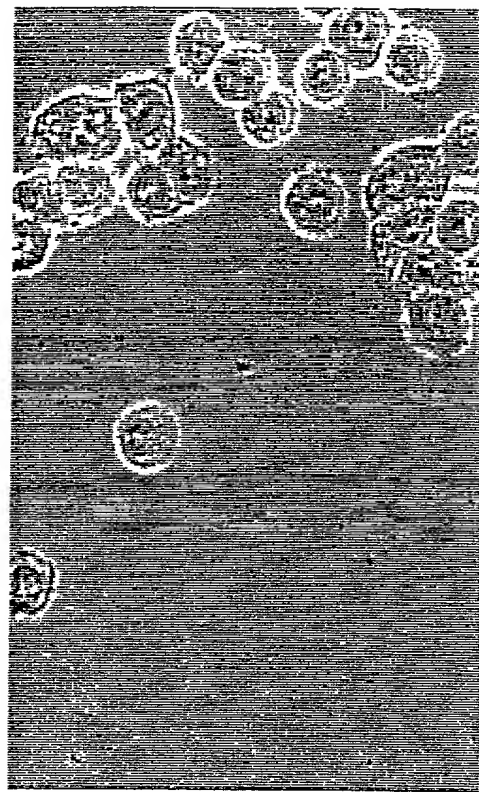
VSV 0.1PFU/18 HRS

FIGURE 3B

VSV INFECTION OF KB CELLS



MOCK INFECTED



VSV moi 1 PFU/18HRS

FIGURE 3C

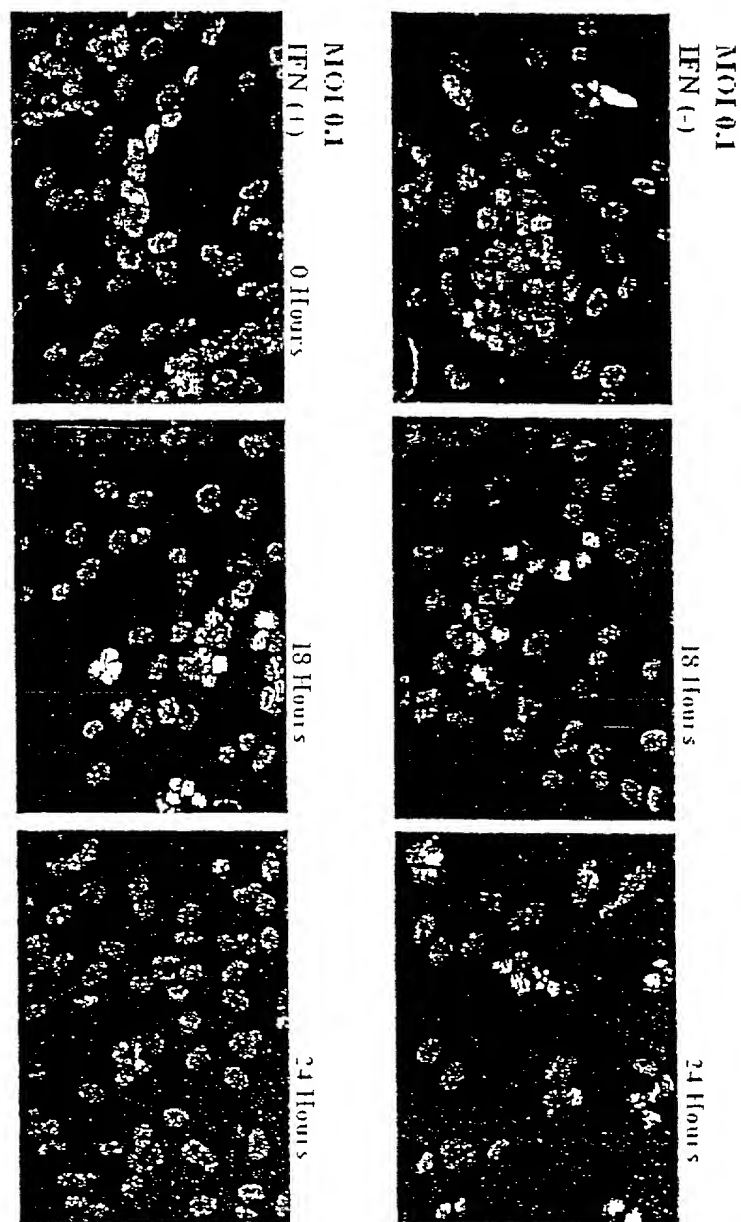


FIGURE 4

Nude Mouse Tumours

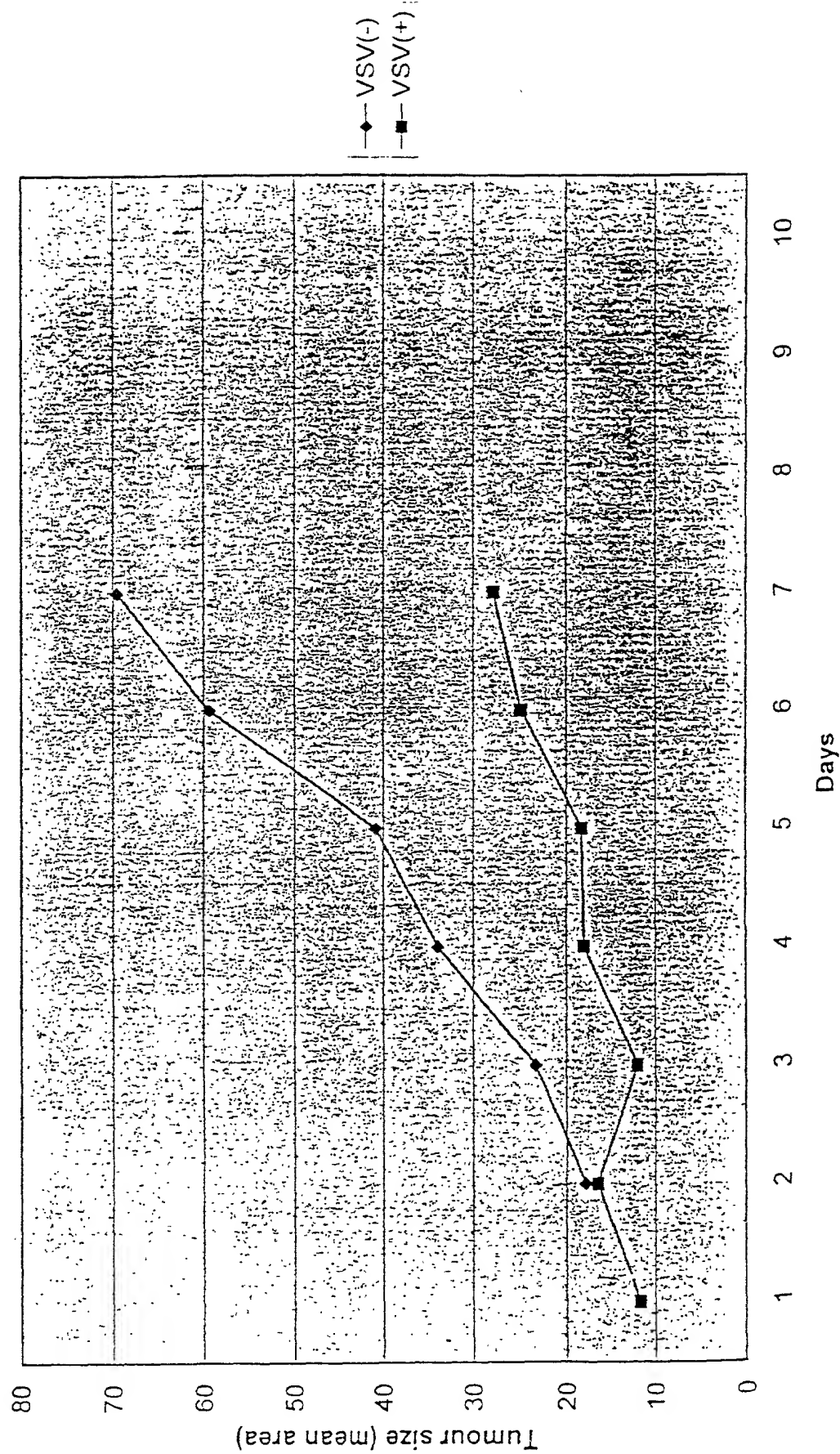


FIGURE 5



FIGURE 6

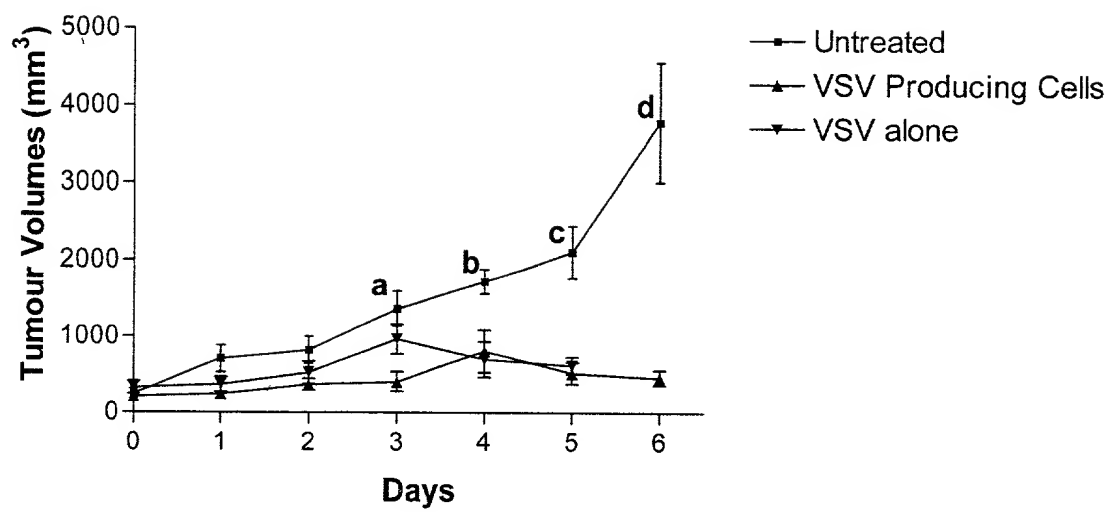
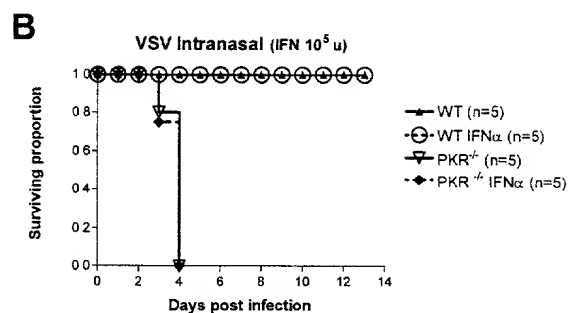
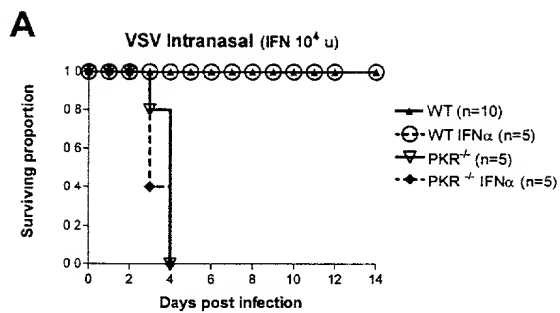


FIGURE 7



FIGURES 8A AND 8B

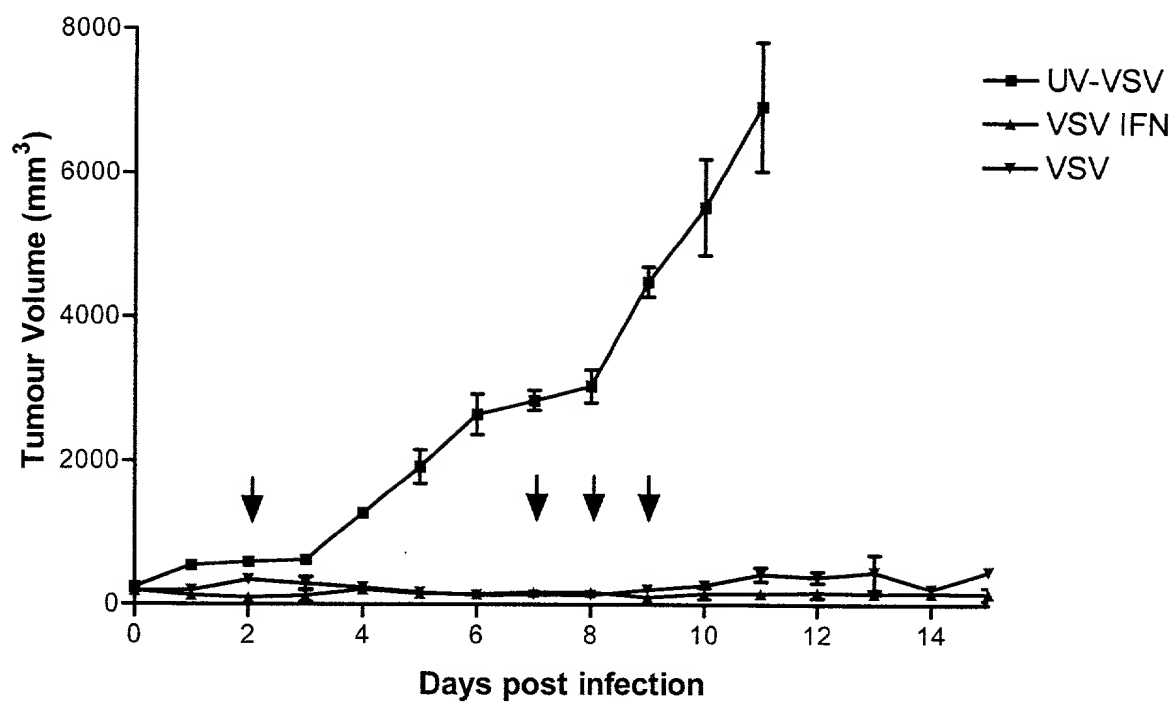


FIGURE 9

Time Course VSV Titres - HCT116 - M.O.I. = 0.1

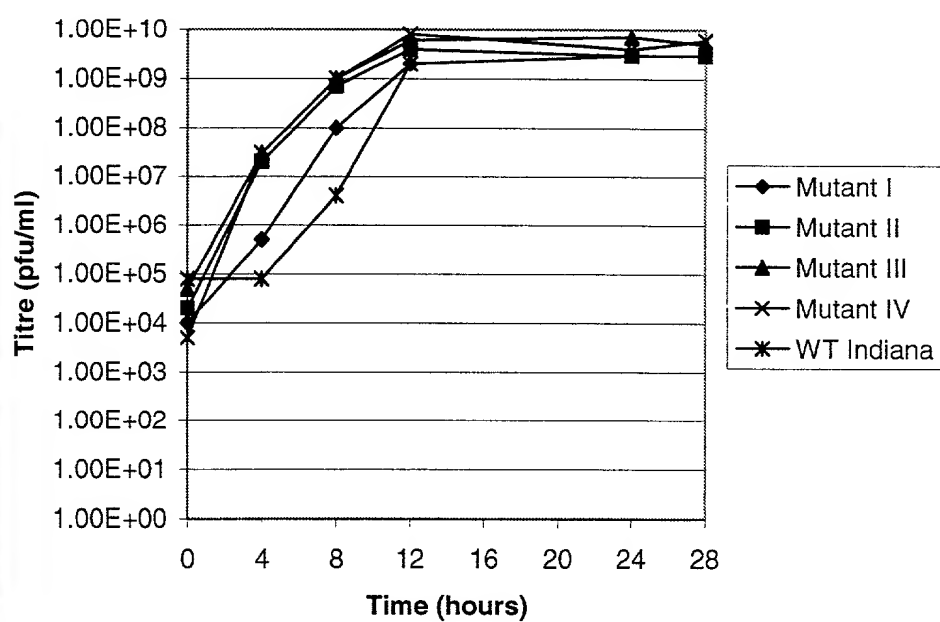


FIGURE 10A

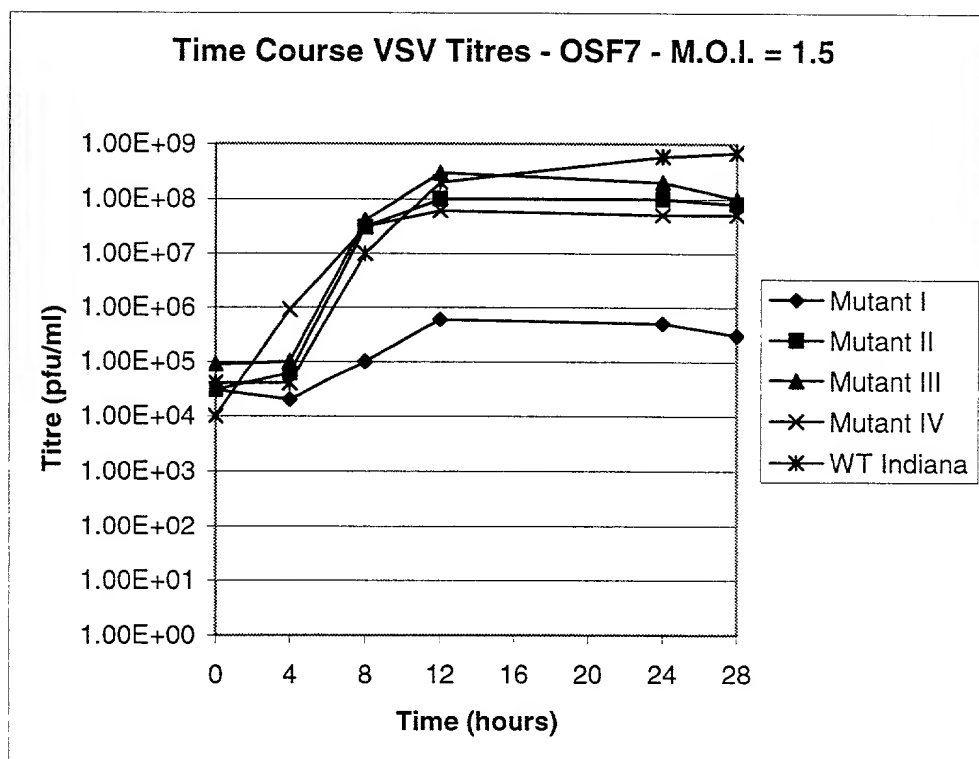


FIGURE 10B

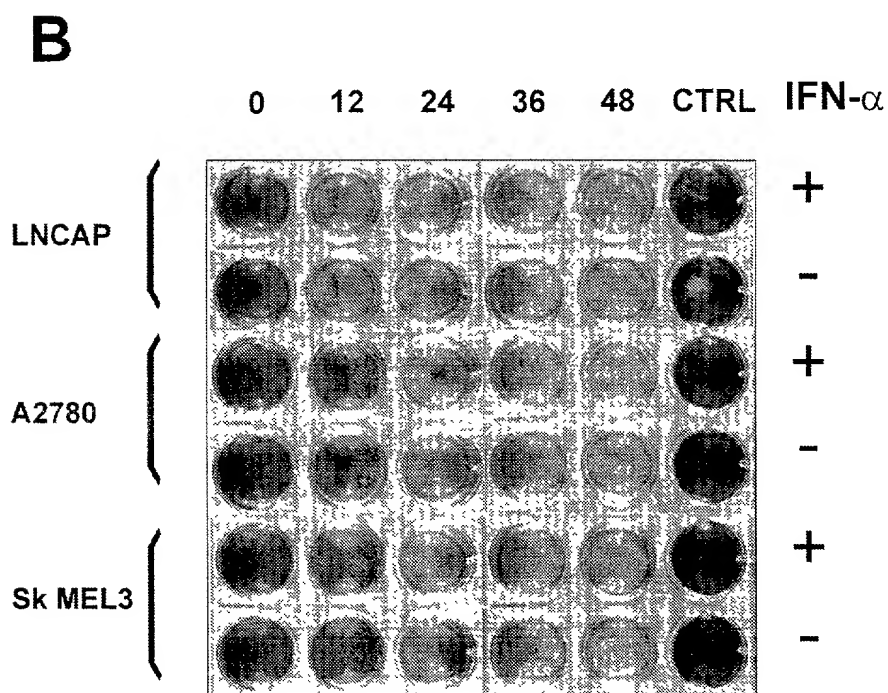
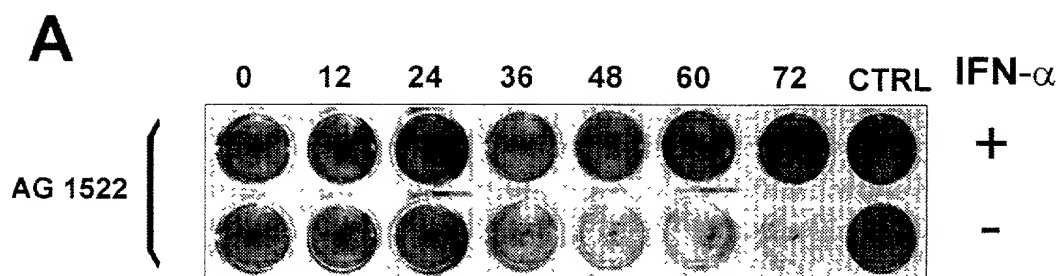


FIGURE 11

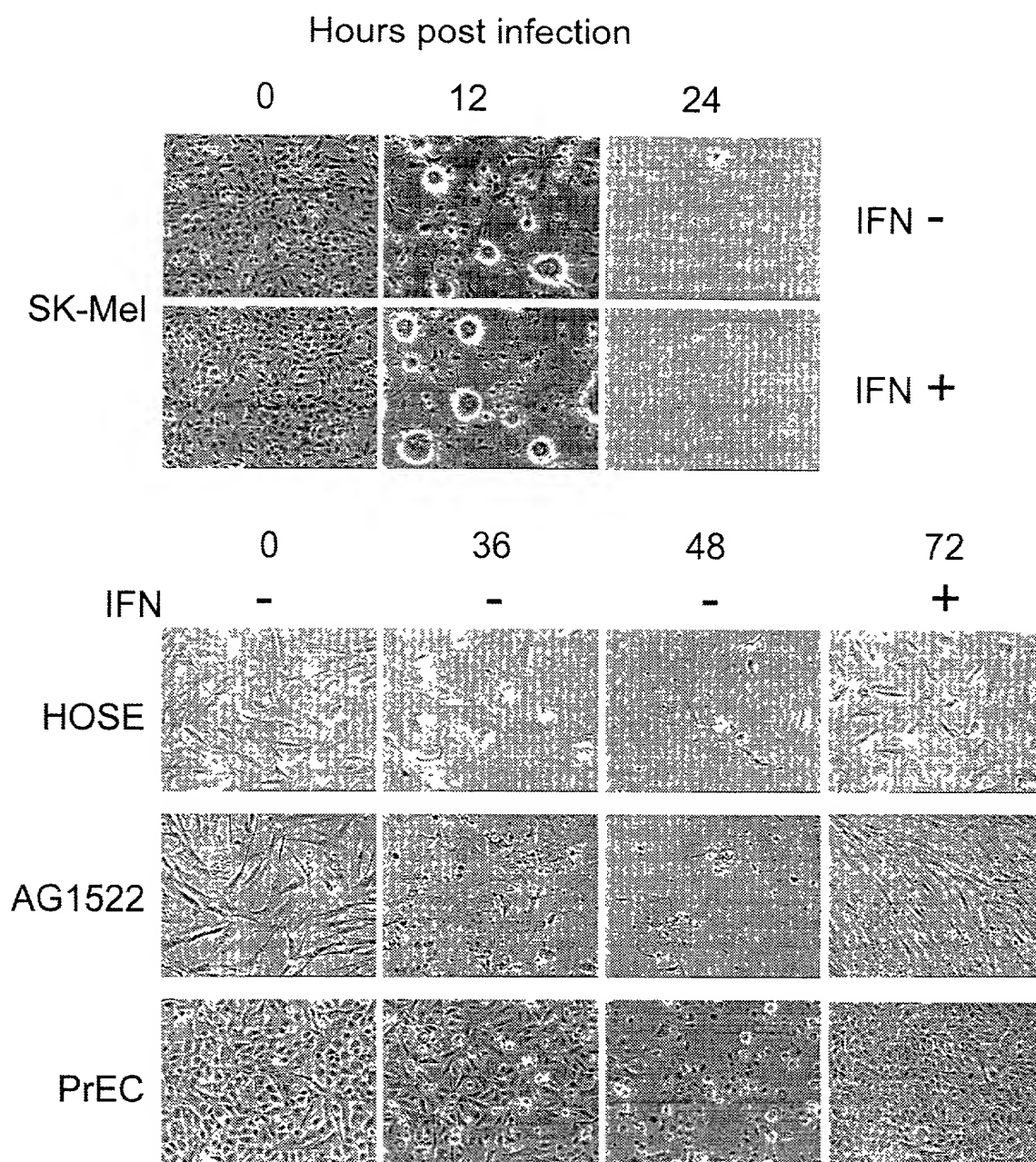


FIGURE 12

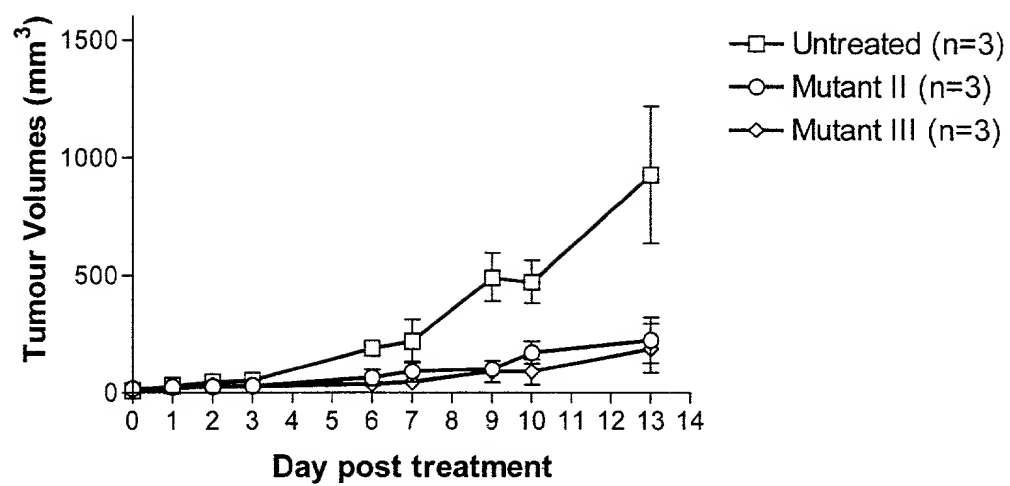


FIGURE 13

GenBank N nucl. 1 ATGTCTGTTACAGTCAAGAGAATCATTGACAACACAGTCATAGTTCCAAAACCTCCTGCA 60
 HR N nucl. ATGTCTGTTACAGTCAAGAGAATCATTGCAACACAGTCATAGTTCCAAAACCTCCTGCA
 M2 N nucl. ATGTCTGTTACAGTCAAGAGAATCATTGACAACACAGTCATAGTTCCAAAACCTCCTGCA
 M3 N nucl. ATGTCTGTTACAGTCAAGAGAATCATTGACAACACAGTCATAGTTCCAAAACCTCCTGCA
 M4 N nucl.

61 120
 GenBank N nucl. AATGAGGATCCAGTGGGAATACCCGGCAGATTACTTCAGAAAATCAAAGGAGATTCCCTCTT
 HR N nucl. AATGAGGATCCAGTGGGAATACCCGGCAGATTACTTCAGAAAATCAAAGGAGATTCCCTCTT
 M2 N nucl. AATGAGGATCCAGTGGGAATACCCGGCAGATTACTTCAGAAAATCAAAGGAGATTCCCTCTT
 M3 N nucl. AATGAGGATCCAGTGGGAATACCCGGCAGATTACTTCAGAAAATCAAAGGAGATTCCCTCTT
 M4 N nucl.

121 180
 GenBank N nucl. TACATCAATACTACAAAAAGTTTGTTCAGATCTAAGAGGATATGTCTACCAAGGCCCTCAA
 HR N nucl. TACATCAATACTACAAAAAGTTTGTTCAGATCTAAGAGGATATGTCTACCAAGGCCCTCAA
 M2 N nucl. TACATCAATACTACAAAAAGTTTGTTCAGATCTAAGAGGATATGTCTACCAAGGCCCTCAA
 M3 N nucl. TACATCAATACTACAAAAAGTTTGTTCAGATCTAAGAGGATATGTCTACCAAGGCCCTCAA
 M4 N nucl.

181 240
 GenBank N nucl. TCCGGAAATGTATCAATCATACATGTCAACAGCTACTTGTATGGAGCATTGAAGGACATC
 HR N nucl. TCCGGAAATGTATCAATCATACATGTCAACAGCTACTTGTATGGAGCATTGAAGGACATC
 M2 N nucl. TCCGGAAATGTATCAATCATACATGTCAACAGCTACTTGTATGGAGCATTGAAGGACATC
 M3 N nucl. TCCGGAAATGTATCAATCATACATGTCAACAGCTACTTGTATGGAGCATTGAAGGACATC
 M4 N nucl.TCAATCATACATGTCAACAGCTACTTGTATGGAGCATTGAAGGACATC

241 300
 GenBank N nucl. CGGGGTAAGTTGGATAAAGATTGGTCAAGTTTCGGAATAAACATCGGGAAAGCAGGGGAT
 HR N nucl. CGGGGTAAGTTGGATAAAGATTGGTCAAGTTTCGGAATAAACATCGGGAAAGCAGGGGAT
 M2 N nucl. CGGGGTAAGTTGGATAAAGATTGGTCAAGTTTCGGAATAAACATCGGGAAAGCAGGGGAT
 M3 N nucl. CGGGGTAAGTTGGATAAAGATTGGTCAAGTTTCGGAATAAACATCGGGAAAGCAGGGGAT
 M4 N nucl. CGGGGTAAGTTGGATAAAGATTGGTCAAGTTTCGGAATAAACATCGGGAAAGCAGGGGAT

301 360
 GenBank N nucl. ACAATCGGAATATTTGACCTTGTATCCTTGAAAGCCCTGGACGGGTACTTCCAGATGGA
 HR N nucl. ACAATCGGAATATTTGACCTTGTATCCTTGAAAGCCCTGGACGGGTACTTCCAGATGGA
 M2 N nucl. ACAATCGGAATATTTGACCTTGTATCCTTGAAAGCCCTGGACGGGTACTTCCAGATGGA
 M3 N nucl. ACAATCGGAATATTTGACCTTGTATCCTTGAAAGCCCTGGACGGGTACTTCCAGATGGA
 M4 N nucl. ACAATCGGAATATTTGACCTTGTATCCTTGAAAGCCCTGGACGGGTACTTCCAGATGGA

361 420
 GenBank N nucl. GTATCGGATGCTTCCAGAACCAGCGCAGATGACAAATGGTTGCCTTTGTATCTACTTGGC
 HR N nucl. GTATCGGATGCTTCCAGAACCAGCGCAGATGACAAATGGTTGCCTTTGTATCTACTTGGC
 M2 N nucl. GTATCGGATGCTTCCAGAACCAGCGCAGATGACAAATGGTTGCCTTTGTATCTACTTGGC
 M3 N nucl. GTATCGGATGCTTCCAGAACCAGCGCAGATGACAAATGGTTGCCTTTGTATCTACTTGGC
 M4 N nucl. GTATCGGATGCTTCCAGAACCAGCGCAGATGACAAATGGTTGCCTTTGTATCTACTTGGC

421 480
 GenBank N nucl. TTATACAGAGTGGGCAGAACACAAATGCCTGAATACAGAAAAAGGCTCATGGATGGGCTG
 HR N nucl. TTATACAGAGTGGGCAGAACACAAATGCCTGAATACAGAAAAAGGCTCATGGATGGGCTG
 M2 N nucl. TTATACAGAGTGGGCAGAACACAAATGCCTGAATACAGAAAAAGGCTCATGGATGGGCTG
 M3 N nucl. TTATACAGAGTGGGCAGAACACAAATGCCTGAATACAGAAAAAGGCTCATGGATGGGCTG
 M4 N nucl. TTATACAGAGTGGGCAGAACACAAATGCCTGAATACAGAAAAAGGCTCATGGATGGGCTG

FIGURE 14-1

| | | | |
|---------|----|-------|---|
| | | 481 | 540 |
| GenBank | N | nucl. | ACAAATCAATGCAAAATGATCAATGAACAGTTTGAACCTCTTGTGCCAGAAGGTCGTGAC |
| | HR | N | nucl. |
| | M2 | N | nucl. |
| | M3 | N | nucl. |
| | M4 | N | nucl. |
| | | 541 | 600 |
| GenBank | N | nucl. | ATTTTGTGATGTGTGGGGAAATGACAGTAATTACACAAAAATTGTCGCTGCAGTGGACATG |
| | HR | N | nucl. |
| | M2 | N | nucl. |
| | M3 | N | nucl. |
| | M4 | N | nucl. |
| | | 601 | 660 |
| GenBank | N | nucl. | TTCTTCCACATGTTCAAAAAACATGAATGTGCCTCGTTCAGATACGGAACCTATTGTTTCC |
| | HR | N | nucl. |
| | M2 | N | nucl. |
| | M3 | N | nucl. |
| | M4 | N | nucl. |
| | | 661 | 720 |
| GenBank | N | nucl. | AGATTCAAAGATTGTGCTGCATTGGCAACATTTGGACACCTCTGCAAAATAACCGGAATG |
| | HR | N | nucl. |
| | M2 | N | nucl. |
| | M3 | N | nucl. |
| | M4 | N | nucl. |
| | | 721 | 780 |
| GenBank | N | nucl. | TCTACAGAAGATGTAACGACCTGGATCTTGAACCGAGAAGTTGCAGATGAGATGGTCCAA |
| | HR | N | nucl. |
| | M2 | N | nucl. |
| | M3 | N | nucl. |
| | M4 | N | nucl. |
| | | 781 | 840 |
| GenBank | N | nucl. | ATGATGCTTCCAGGCCAAGAAATTGACAAGGCCGATTCATACATGCCTTATTTGATCGAC |
| | HR | N | nucl. |
| | M2 | N | nucl. |
| | M3 | N | nucl. |
| | M4 | N | nucl. |
| | | 841 | 900 |
| GenBank | N | nucl. | TTTGGATTGTCTTCTAAGTCTCCATATTCTTCCGTCAAAAACCCCTGCCTTCCACTTCTGG |
| | HR | N | nucl. |
| | M2 | N | nucl. |
| | M3 | N | nucl. |
| | M4 | N | nucl. |

FIGURE 14-2

| | | | | | | |
|---------|---|-------|--|--|------|------|
| | | | | 901 | | 960 |
| GenBank | N | nucl. | | GGGCAATTGACAGCTCTTCTGCTCAGATCCACCAGAGCAAGGAATGCCCGACAGCCTGAT | | |
| HR | N | nucl. | | GGGCAATTGACAGCTCTTCTGCTCAGATCCACCAGAGCAAGGAATGCCCGACAGCCTGAT | | |
| M2 | N | nucl. | | GGGCAATTGACAGCTCTTCTGCTCAGATCACCAGAGCAAGGAATGCCCGACAGCCTGAT | | |
| M3 | N | nucl. | | GGGCAATTGACAGCTCTTCTGCTCAGATCCACCAGAGCAAGGAATGCCCGACAGCCTGAT | | |
| M4 | N | nucl. | | GGGCAATTGAC.....T | | |
| | | | | | | |
| | | | | 961 | | 1020 |
| GenBank | N | nucl. | | GACATTGAGTATACATCTCTTACTACAGCAGGTTTGTGTACGCTTATGCAGTAGGATCC | | |
| HR | N | nucl. | | GACATTGAGTATACATCTCTTACTACAGCAGGTTTGTGTACGCTTATGCAGTAGGATCC | | |
| M2 | N | nucl. | | GACATTGAGTATACATCTCTTACTACAGCAGGTTTGTGTACGCTTATGCAGTAGGATCC | | |
| M3 | N | nucl. | | GACATTGAGTATACATCTCTTACTACAGCAGGTTTGTGTACGCTTATGCAGTAGGATCC | | |
| M4 | N | nucl. | | GACATTGAGTATACATCTCTTACTACAGCAGGTTTGTGTACGCTTATGCAGTAGGATCC | | |
| | | | | | | |
| | | | | 1021 | | 1080 |
| GenBank | N | nucl. | | TCTGCTGACTTGGCACAACAGTTTTGTGTTGGAGATAAAACAAATACACTCCAGATGATAGT | | |
| HR | N | nucl. | | TCTGCTGACTTGGCACAACAGTTTTGTGTTGGAGATAGCAAATACACTCCAGATGATAGT | | |
| M2 | N | nucl. | | TCTGCTGACTTGGCACAACAGTTTTGTGTTGGAGATAGCAAATACACTCCAGATGATAGT | | |
| M3 | N | nucl. | | TCTGCTGACTTGGCACAACAGTTTTGTGTTGGAGATAGCAAATACACTCCAGATGATAGT | | |
| M4 | N | nucl. | | TCTGCTGACTTGGCACAACAGTTTTGTGTTGGAGATAGCAAATACACTCCAGATGATAGT | | |
| | | | | | | |
| | | | | 1081 | | 1140 |
| GenBank | N | nucl. | | ACCGGAGGATTGACGACTAATGCACCGCCACAAGGCAGAGATGTGGTCGAATGGCTCGGA | | |
| HR | N | nucl. | | ACCGGAGGATTGACGACTAATGCACCGCCACAAGGCAGAGATGTGGTCGAATGGCTCGGA | | |
| M2 | N | nucl. | | ACCGGAGGATTGACGACTAATGCACCGCCACAAGGCAGAGATGTGGTCGAATGGCTCGGA | | |
| M3 | N | nucl. | | ACCGGAGGATTGACGACTAATGCACCGCCACAAGGCAGAGATGTGGTCGAATGGCTCGGA | | |
| M4 | N | nucl. | | ACCGGAGGATTGACGACTAATGCACCGCCACAAGGCAGAGATGTGGTCGAATGGCTCGGA | | |
| | | | | | | |
| | | | | 1141 | | 1200 |
| GenBank | N | nucl. | | TGGTTTGAAGATCAAAACAGAAAACCGACTCCTGATATGATGCAGTATGCGAAAAGAGCA | | |
| HR | N | nucl. | | TGGTTTGAAGATCAAAACAGAAAACCGACTCCTGATATGATGCAGTATGCGAAAACGAGCA | | |
| M2 | N | nucl. | | TGGTTTGAAGATCAAAACAGAAAACCGACTCCTGATATGATGCAGTATGCGAAAACGAGCA | | |
| M3 | N | nucl. | | TGGTTTGAAGATCAAAACAGAAAACCGACTCCTGATATGATGCAGTATGCGAAAACGAGCA | | |
| M4 | N | nucl. | | TGGTTTGAAGATCAAAACAGAAAACCGACTCCTGATATGATGCAGTATGCGAAAACGAGCA | | |
| | | | | | | |
| | | | | 1201 | | 1260 |
| GenBank | N | nucl. | | GTCATGTCACTGCAAGGCCCTAAGAGAGAAGACAATTGGCAAGTATGCTAAGTCAGAATTT | | |
| HR | N | nucl. | | GTCATGTCACTGCAAGGCCCTAAGAGAGAAGACAATTGGCAAGTATGCTAAGTCAGAATTT | | |
| M2 | N | nucl. | | GTCATGTCACTGCAAGGCCCTAAGAGAGAAGACAATTGGCAAGTATGCTAAGTCAGAATTT | | |
| M3 | N | nucl. | | GTCATGTCACTGCAAGGCCCTAAGAGAGAAGACAATTGGCAAGTATGCTAAGTCAGAATTT | | |
| M4 | N | nucl. | | GTCATGTCACTGCAAGGCCCTAAGAGAGAAGACAATTGGCAAGTATGCTAAGTCAGAATTT | | |
| | | | | | | |
| | | | | 1261 | 1269 | |
| GenBank | N | nucl. | | GACAAATGA | | |
| HR | N | nucl. | | GACAAATGA | | |
| M2 | N | nucl. | | GACAAATGA | | |
| M3 | N | nucl. | | GACAAATGA | | |
| M4 | N | nucl. | | GACAAATGA | | |

| | | | |
|---------|--------|---|-----|
| | | 1 | 60 |
| GenBank | N a.a. | MSVTVKRIIDNTVIVPKLPANEDPVEYPADYFRKSKEIPLYINTTKSLSDLRGYVYQGLK | |
| HR | N a.a. | MSVTVKRIIDNTVIVPKLPANEDPVEYPADYFRKSKEIPLYINTTKSLSDLRGYVYQGLK | |
| M3 | N a.a. | MSVTVKRIIDNTVIVPKLPANEDPVEYPADYFRKSKEIPLYINTTKSLSDLRGYVYQGLK | |
| M4 | N a.a. | ..... |  |
| | | 61 | 120 |
| GenBank | N a.a. | SGNVSIHVNLSYLYGALKDIRGKLDKDWSSFGINIGKAGDTIGIFDLVSLKALDGVLPDG | |
| HR | N a.a. | SGNVSIHVNLSYLYGALKDIRGKLDKDWSSFGINIGKAGDTIGIFDLVSLKALDGVLPDG | |
| M3 | N a.a. | SGNVSIHVNLSYLYGALKDIRGKLDKDWSSFGINIGKAGDTIGIFDLVSLKALDGVLPDG | |
| M4 | N a.a. |SIHVNLSYLYGALKDIRGKLDKDWSSFGINIGKAGDTIGIFDLVSLKALDGVLPDG | |
| | | 121 | 180 |
| GenBank | N a.a. | VSDASRTSADDKWLPLYLLGLYRVGRTQMPEYRK K LMDGLTNQCKMINEQFEPLVPEGRD | |
| HR | N a.a. | VSDASRTSADDKWLPLYLLGLYRVGRTQMPEYRKRLMDGLTNQCKMINEQFEPLVPEGRD | |
| M3 | N a.a. | VSDASRTSADDKWLPLYLLGLYRVGRTQMPEYRKRLMDGLTNQCKMINEQFEPLVPEGRD | |
| M4 | N a.a. | VSDASRTSADDKWLPLYLLGLYRVGRTQMPEYRKRLMDGLTNQCKMINEQFEPLVPEGRD | |
| | | 181 | 240 |
| GenBank | N a.a. | IFDVWGNDSNYTKIVAAVDMFFHMFKKHECASFRYGTIVSRFKDCAALATFGHLCKITGM | |
| HR | N a.a. | IFDVWGNDSNYTKIVAAVDMFFHMFKKHECASFRYGTIVSRFKDCAALATFGHLCKITGM | |
| M3 | N a.a. | IFDVWGNDSNYTKIVAAVDMFFHMFKKHECASFRYGTIVSRFKDCAALATFGHLCKITGM | |
| M4 | N a.a. | IFDVWGNDSNYTKIVAAVDMFFHMFKKHECASFRYGTIVSRFKDCAALATFGHLCKITGM | |
| | | 241 | 300 |
| GenBank | N a.a. | STEDVTTWILNREVADEMVMMLPGQEIDKADSYMPYLIDFGLSSKSPYSSVKNPAFHFW | |
| HR | N a.a. | STEDVTTWILNREVADEMVMMLPGQEIDKADSYMPYLIDFGLSSKSPYSSVKNPAFHFW | |
| M3 | N a.a. | STEDVTTWILNREVADEMVMMLPGQEIDKADSYMPYLIDFGLSSKSPYSSVKNPAFHFW | |
| M4 | N a.a. | STEDVTTWILNREVADEMVMMLPGQEIDKADSYMPYLIDFGLSSKSPYSSVKNPAFHFW | |
| | | 301 | 360 |
| GenBank | N a.a. | GQLTALLLRSTRARNARQPDDIEYTSLT T TAGLLYAYAVGSSADLAQQFCVGD N KYTPDDS | |
| HR | N a.a. | GQLTALLLRSTRARNARQPDDIEYTSLT T TAGLLYAYAVGSSADLAQQFCVGD N KYTPDDS | |
| M3 | N a.a. | GQLTALLLRSTRARNARQPDDIEYTSLT T TAGLLYAYAVGSSADLAQQFCVGD N KYTPDDS | |
| M4 | N a.a. | GQLT.....DIEYTS T TAGLLYAYAVGSSADLA N QFCVGD N KYTPDDS | |
| | | 361 | 420 |
| GenBank | N a.a. | TGGLTTNAPPQGRDVVEWLGFEDQNRKPTPDMMQYAKRAVMSLQGLREKTIGKYAKSEF | |
| HR | N a.a. | TGGLTTNAPPQGRDVVEWLGFEDQNRKPTPDMMQYAKRAVMSLQGLREKTIGKYAKSEF | |
| M3 | N a.a. | TGGLTTNAPPQGRDVVEWLGFEDQNRKPTPDMMQYAKRAVMSLQGLREKTIGKYAKSEF | |
| M4 | N a.a. | TGGLTTNAPPQGRDVVEWLGFEDQNRKPTPDMMQYAKRAVMSLQGLREKTIGKYAKSEF | |
| | | 421 | 423 |
| GenBank | N a.a. | DK. | |
| HR | N a.a. | DK. | |
| M3 | N a.a. | DK. | |
| M4 | N a.a. | DK. | |

FIGURE 15

1 60
 GenBank P nucl. ATGGATAATCTCACAAAAGTTCGTGAGTATCTCAAGTCCTATTCTCGTCTGATCAGGCG
 HR P nucl. ATGGATAATCTCACAAAAGTTCGTGAGTATCTCAAGTCCTATTCTCGTCTAGATCAGGCG
 M2 P nucl. ATGGATAATCTCACAAAAGTTCGTGAGTATCTCAAGTCCTATTCTCGTCTAGATCAGGCG
 M3 P nucl. ATGGATAATCTCACAAAAGTTCGTGAGTATCTCAAGTCCTATTCTCGTCTAGATCAGGCG
 M4 P nucl. ATGGATAATCTCACAAAAGTTCGTGAGTATCTCAAGTCCTATTCTCGTCTAGATCAGGCG

61 120
 GenBank P nucl. GTAGGAGAGATAGATGAGATCGAAGCACAACGAGCTGAAAAGTCCAATTATGAGTTGTTC
 HR P nucl. GTAGGAGAGATAGATGAGATCGAAGCACAACGAGCTGAAAAGTCCAATTATGAGTTGTTC
 M2 P nucl. GTAGGAGAGATAGATGAGATCGAAGCACAACGAGCTGAAAAGTCCAATTATGAGTTGTTC
 M3 P nucl. GTAGGAGAGATAGATGAGATCGAAGCACAACGAGCTGAAAAGTCCAATTATGAGTTGTTC
 M4 P nucl. GTAGGAGAGATAGATGAGATCGAAGCACAACGAGCTGAAAAGTCCAATTATGAGTTGTTC

121 180
 GenBank P nucl. CAAGAGGATGGAGTGAAGAGCATACTAGCCCTCTTATTTTCAGGCAGCAGATGATTCT
 HR P nucl. CAAGAGGACGGAGTGAAGAGCATACTAGGCCCTCTTATTTTCAGGCAGCAGATGATTCT
 M2 P nucl. CAAGAGGACGGAGTGAAGAGCATACTAGGCCCTCTTATTTTCAGGCAGCAGATGATTCT
 M3 P nucl. CAAGAGGACGGAGTGAAGAGCATACTAGGCCCTCTTATTTTCAGGCAGCAGATGATTCT
 M4 P nucl. CAAGAGGACGGAGTGAAGAGCATACTAGGCCCTCTTATTTTCAGGCAGCAGATGATTCT

181 240
 GenBank P nucl. GACACAGAATCTGAACCAGAAATTGAAGACAATCAAGGTTTGTATGCACAGGATCCAGAA
 HR P nucl. GACACAGAATCTGAACCAGAAATTGAAGACAATCAAGGCTTGTATGTACCAGATCCGGAA
 M2 P nucl. GACACAGAATCTGAACCAGAAATTGAAGACAATCAAGGCTTGTATGTACCAGATCCGGAA
 M3 P nucl. GACACAGAATCTGAACCAGAAATTGAAGACAATCAAGGCTTGTATGTACCAGATCCGGAA
 M4 P nucl. GACACAGAATCTGAACCAGAAATTGAAGACAATCAAGGCTTGTATGTACCAGATCCGGAA

241 300
 GenBank P nucl. GCTGAGCAAGTTGAAGGCTTTATACAGGGGCCTTTAGATGACTATGCGATGAGGAAGTG
 HR P nucl. GCTGAGCAAGTTGAAGGCTTTATACAGGGGCCTTTAGATGACTATGCGGATGAGGACGTG
 M2 P nucl. GCTGAGCAAGTTGAAGGCTTTATACAGGGGCCTTTAGATGACTATGCGGATGAGGACGTG
 M3 P nucl. GCTGAGCAAGTTGAAGGCTTTATACAGGGGCCTTTAGATGACTATGCGGATGAGGACGTG
 M4 P nucl. GCTGAGCAAGTTGAAGGCTTTATACAGGGGCCTTTAGATGACTATGCGGATGAGGACGTG

301 360
 GenBank P nucl. GATGTTGTATTACTTCGGACTGGAAACCACTGAGCTTGAATCTGACGAGCATGGAAAG
 HR P nucl. GATGTTGTATTACTTCGGACTGGAAACAGCCTGAGCTTGAATCCGACGAGCATGGAAAG
 M2 P nucl. GATGTTGTATTACTTCGGACTGGAAACAGCCTGAGCTTGAATCCGACGAGCATGGAAAG
 M3 P nucl. GATGTTGTATTACTTCGGACTGGAAACAGCCTGAGCTTGAATCCGACGAGCATGGAAAG
 M4 P nucl. GATGTTGTATTACTTCGGACTGGAAACAGCCTGAGCTTGAATCCGACGAGCATGGAAAG

361 420
 GenBank P nucl. ACCTTACGGTTGACATTGCCAGAGGGTTTAAGTGGAGAGCAGAAATCCCAGTGGCTTTG
 HR P nucl. ACCTTACGGTTGACATTGCCAGAGGGTTTAAGTGGAGAGCAGAAATCCCAGTGGCTTTTG
 M2 P nucl. ACCTTACGGTTGACATTGCCAGAGGGTTTAAGTGGAGAGCAGAAATCCCAGTGGCTTTTG
 M3 P nucl. ACCTTACGGTTGACATTGCCAGAGGGTTTAAGTGGAGAGCAGAAATCCCAGTGGCTTTTG
 M4 P nucl. ACCTTACGGTTGACATTGCCAGAGGGTTTAAGTGGAGAGCAGAAATCCCAGTGGCTTTTG

FIGURE 16-1

GenBank P nucl. 421 480
 HR P nucl. ACGATTAAAGCAGTCGTCAAAGTGCCAAACTGGAATCTGGCAGAGTGCACATTTGAA
 M2 P nucl. ACGATTAAAGCAGTCGTCAAAGTGCCAAACTGGAATCTGGCAGAGTGCACATTTGAA
 M3 P nucl. ACGATTAAAGCAGTCGTCAAAGTGCCAAACTGGAATCTGGCAGAGTGCACATTTGAA
 M4 P nucl. ACGATTAAAGCAGTCGTCAAAGTGCCAAACTGGAATCTGGCAGAGTGCACATTTGAA

GenBank P nucl. 481 540
 HR P nucl. GCATCGGGAGAAGGGGTCATATGAAGGAGCGCCAGATAACTCCGGATGTATATAAGGTC
 M2 P nucl. GCATCGGGAGAAGGGGTCATCATAAAAAAGCGCCAGATAACTCCGGATGTATATAAGGTC
 M3 P nucl. GCATCGGGAGAAGGGGTCATCATAAAAAAGCGCCAGATAACTCCGGATGTATATAAGGTC
 M4 P nucl. GCATCGGGAGAAGGGGTCATCATAAAAAAGCGCCAGATAACTCCGGATGTATATAAGGTC

GenBank P nucl. 541 600
 HR P nucl. ACTCCAGTGATGAACACACATCCGTCCCAATCAGAAGCAGTATCAGATGTTTGGTCTCTC
 M2 P nucl. ACTCCAGTGATGAACACACATCCGTCCCAA.....
 M3 P nucl. ACTCCAGTGATGAACACACATCCGTCCCAATCGAAGCCGTATCAGATGTTTGGTCTCTC
 M4 P nucl. ACTCCAGTGATGAACACACATCCGTCCCAATCAGAAGCCGTATCAGATGTTTGGTCTCTC

GenBank P nucl. 601 660
 HR P nucl. TCAAAGACATCCATGACTTTCCAACCCAAGAAAGCAAGTCTTCAGCCTCTCACCATATCC
 M2 P nucl. TCAAAGACATCCATGACTTTCCAACCCAAGAAAGCAAGTCTTCAGCCTCTCACCATATCC
 M3 P nucl. TCAAAGACATCCATGACTTTCCAACCCAAGAAAGCAAGTCTTCAGCCTCTCACCATATCC
 M4 P nucl. TCAAAGACATCCATGACTTTCCAACCCAAGAAAGCAAGTCTTCAGCCTCTCACCATATCC

GenBank P nucl. 661 720
 HR P nucl. TTGGATGAATTGTTCTCATCTAGAGGAGAGTTTCATCTCTGTCTCGGAGGTACGGACGAATG
 M2 P nucl. TTGGATGAATTGTTCTCATCTAGAGGAGAAATTCATCTCTGTCTCGGAGGTACGGACGAATG
 M3 P nucl. TTGGATGAATTGTTCTCATCTAGAGGAGAAATTCATCTCTGTCTCGGAGGTACGGACGAATG
 M4 P nucl. TTGGATGAATTGTTCTCATCTAGAGGAGAAATTCATCTCTGTCTCGGAGGTACGGACGAATG

GenBank P nucl. 721 780
 HR P nucl. TCTCATAAAGAGGCCATCCTGCTCGGCTGAGATACAAAAAGTTGTACAATCAGGCGAGA
 M2 P nucl. TCTCATAAAGAGGCCATCCTGCTCGGCTGAGGTACAAAAAGTTGTACAATCAGGCGAGA
 M3 P nucl. TCTCATAAAGAGGCCATCCTGCTCGGCTGAGGTACAAAAAGTTGTACAATCAGGCGAGA
 M4 P nucl. TCTCATAAAGAGGCCATCCTGCTCGGCTGAGGTACAAAAAGTTGTACAATCAGGCGAGA

GenBank P nucl. 781 798
 HR P nucl. GTCAAATATTCTCTGTAG
 M2 P nucl. GTCAAATATTCTCTGTAG
 M3 P nucl. GTCAAATATTCTCTGTAG
 M4 P nucl. GTCAAATATTCTCTGTAG

FIGURE 16-2

2

| | | | |
|---------|---------|--|--|
| | | 1 | 60 |
| GenBank | P a. a. | MDNLT KVREYLKSYSRLDQAVGEIDEIEAQRAEKS NYELFQEDGVEEHTKPSYFQAADDS | |
| | HR | P a. a. | MDNLT KVREYLKSYSRLDQAVGEIDEIEAQRAEKS NYELFQEDGVEEHTRPSYFQAADDS |
| | M2 | P a. a. | MDNLT KVREYLKSYSRLDQAVGEIDEIEAQRAEKS NYELFQEDGVEEHTRPSYFQAADDS |
| | M3 | P a. a. | MDNLT KVREYLKSYSRLDQAVGEIDEIEAQRAEKS NYELFQEDGVEEHTRPSYFQAADDS |
| | M4 | P a. a. | MDNLT KVREYLKSYSRLDQAVGEIDEIEAQRAEKS NYELFQEDGVEEHTRPSYFQAADDS |
| | | 61 | 120 |
| GenBank | P a. a. | DTESEPEIEDNQGLYVDPPEAEQVEGFIQGGLDDYADEVDVVFTSDWKQPELESDEHGK | |
| | HR | P a. a. | DTESEPEIEDNQGLYVDPPEAEQVEGFIQGGLDDYADEVDVVFTSDWKQPELESDEHGK |
| | M2 | P a. a. | DTESEPEIEDNQGLYVDPPEAEQVEGFIQGGLDDYADEVDVVFTSDWKQPELESDEHGK |
| | M3 | P a. a. | DTESEPEIEDNQGLYVDPPEAEQVEGFIQGGLDDYADEVDVVFTSDWKQPELESDEHGK |
| | M4 | P a. a. | DTESEPEIEDNQGLYVDPPEAEQVEGFIQGGLDDYADEVDVVFTSDWKQPELESDEHGK |
| | | 121 | 180 |
| GenBank | P a. a. | TLRLTLPEGLSGEQKSQWLLTIKAVVQSAKHWNLAECTFEASGEGVIKKRQITPDVYKV | |
| | HR | P a. a. | TLRLTLPEGLSGEQKSQWLLTIKAVVQSAKHWNLAECTFEASGEGVIKKRQITPDVYKV |
| | M2 | P a. a. | TLRLTLPEGLSGEQKSQWLLTIKAVVQSAKHWNLAECTFEASGEGVIKKRQITPDVYKV |
| | M3 | P a. a. | TLRLTLPEGLSGEQKSQWLLTIKAVVQSAKHWNLAECTFEASGEGVIKKRQITPDVYKV |
| | M4 | P a. a. | TLRLTLPEGLSGEQKSQWLLTIKAVVQSAKHWNLAECTFEASGEGVIKKRQITPDVYKV |
| | | 181 | 240 |
| GenBank | P a. a. | TPVMNTHPSQSEAVSDVWSLSKTSMTFQPKKASLQPLTISLDELFSRGEFISVGGNGRM | |
| | HR | P a. a. | TPVMNTHPSQSEAVSDVWSLSKTSMTFQPKKASLQPLTISLDELFSRGEFISVGGNGRM |
| | M2 | P a. a. | TPVMNTHPSQ..... |
| | M3 | P a. a. | TPVMNTHPSQSEAVSDVWSLSKTSMTFQPKKASLQPLTISLDELFSRGEFISVGGNGRM |
| | M4 | P a. a. | TPVMNTHPSQSEAVSDVWSLSKTSMTFQPKKASLQPLTISLDELFSRGEFISVGGNGRM |
| | | 241 | 266 |
| GenBank | P a. a. | SHKEAILLGLRYKKLYNQARVKYSL | |
| | HR | P a. a. | SHKEAILLGLRYKKLYNQARVKYSL |
| | M2 | P a. a. | ..... |
| | M3 | P a. a. | SHKEAILLGLRYKKLYNQARVKYSL |
| | M4 | P a. a. | SHKEAILLGLRYKKLYNQARVKYSL |

FIGURE 17

| | | | | |
|---------|---|-------|--|-----|
| | | | 1 | 60 |
| GenBank | M | nucl. | ATGAGTTCCTTAAAGAAGATTCTCGGTCTGAAGGGGAAAGGTAAGAAATCTAAGAAATTA | |
| HR | M | nucl. | ATGAGTTCCTTAAAGAAGATTCTCGGTCTGAAGGGGAAAGGTAAGAAATCTAAGAAATTA | |
| M3 | M | nucl. | ATGAGTTCCTTAAAGAAGATTCTCGGTCTGAAGGGGAAAGGTAAGAAATCTAAGAAATTA | |
| M4 | M | nucl. | ATGAGTTCCTTAAAGAAGATTCTCGGTCTGAAGGGGAAAGGTAAGAAATCTAAGAAATTA | |
| | | | 61 | 120 |
| GenBank | M | nucl. | GGGATCGCACCACCCCTTATGAAGAGGACACTACCATGGAGTATGCTCCGAGCGCTCCA | |
| HR | M | nucl. | GGGATCGCACCACCCCTTATGAAGAGGACACTAACATGGAGTATGCTCCGAGCGCTCCA | |
| M3 | M | nucl. | GGGATCGCACCACCCCTTATGAAGAGGACACTAACATGGAGTATGCTCCGAGCGCTCCA | |
| M4 | M | nucl. | GGGATCGCACCACCCCTTATGAAGAGGACACTAACATGGAGTATGCTCCGAGCGCTCCA | |
| | | | 121 | 180 |
| GenBank | M | nucl. | ATTGACAAATCCTATTTTGGAGTTGACGAGATGGACACCTATGATCCGAATCAATTAAGA | |
| HR | M | nucl. | ATTGACAAATCCTATTTTGGAGTTGACGAGATGGACACTCATGATCCGCATCAATTAAGA | |
| M3 | M | nucl. | ATTGACAAATCCTATTTTGGAGTTGACGAGACGGACACTCATGATCCGCATCAATTAAGA | |
| M4 | M | nucl. | ATTGACAAATCCTATTTTGGAGTTGACGAGATGGACACTCATGATCCGCATCAATTAAGA | |
| | | | 181 | 240 |
| GenBank | M | nucl. | TATGAGAAATTCTTCTTTACAGTGAAAATGACGGTTAGATCTAATCGTCCGTTTCAAGAACA | |
| HR | M | nucl. | TATGAGAAATTCTTCTTTACAGTGAAAATGACGGTTAGATCTAATCGTCCGTTTCAAGAACA | |
| M3 | M | nucl. | TATGAGAAATTCTTCTTTACAGTGAAAATGACGGTTAGATCTAATCGTCCGTTTCAAGAACA | |
| M4 | M | nucl. | TATGAGAAATTCTTCTTTACAGTGAAAATGACGGTTAGATCTAATCGTCCGTTTCAAGAACA | |
| | | | 241 | 300 |
| GenBank | M | nucl. | TACTCAGATGTGGCAGCCGCTGTATCCCATTTGGGATCACATGTACATCGGAATGGCAGGG | |
| HR | M | nucl. | TACTCAGATGTGGCAGCCGCTGTATCCCATTTGGGATCACATGTACATCGGAATGGCAGGG | |
| M3 | M | nucl. | TACTCAGATGTGGCAGCCGCTGTATCCCATTTGGGATCACATGTACATCGGAATGGCAGGG | |
| M4 | M | nucl. | TACTCAGATGTGGCAGCCGCTGTATCCCATTTGGGATCACATGTACATCGGAATGGCAGGG | |
| | | | 301 | 360 |
| GenBank | M | nucl. | AAACGTCCCTTCTACAAATCTTGGCTTTTTTGGGTCTTCTAATCTAAAGGCCACTCCA | |
| HR | M | nucl. | AAACGTCCCTTCTACAAAGATCTTGGCTTTTTTGGGTCTTCTAATCTAAAGGCCACTCCA | |
| M3 | M | nucl. | AAACGTCCCTTCTACAAAGATCTTGGCTTTTTTGGGTCTTCTAATCTAAAGGCCACTCCA | |
| M4 | M | nucl. | AAACGTCCCTTCTACAAAGATCTTGGCTTTTTTGGGTCTTCTAATCTAAAGGCCACTCCA | |
| | | | 361 | 420 |
| GenBank | M | nucl. | GCGGTATTGGCAGATCAAGGTCAACCAGAGTATCACACTCACTGCGAAGGCAGGGCTTAT | |
| HR | M | nucl. | GCGGTATTGGCAGATCAAGGTCAACCAGAGTATCACGCTCACTGTGAAGGCAGGGCTTAT | |
| M3 | M | nucl. | GCGGTATTGGCAGATCAAGGTCAACCAGAGTATCACGCTCACTGTGAAGGCAGGGCTTAT | |
| M4 | M | nucl. | GCGGTATTGGCAGATCAAGGTCAACCAGAGTATCACGCTCACTGTGAAGGCAGGGCTTAT | |
| | | | 421 | 480 |
| GenBank | M | nucl. | TTGCCACATAGCATGGGGAAGACCCCTCCCATGCTCAATGTACCAGAGCACTTCAGAAGA | |
| HR | M | nucl. | TTGCCACACAGAATGGGGAAGACCCCTCCCATGCTCAATGTACCAGAGCACTTCAGAAGA | |
| M3 | M | nucl. | TTGCCACACAGAATGGGGAAGACCCCTCCCATGCTCAATGTACCAGAGCACTTCAGAAGA | |
| M4 | M | nucl. | TTGCCACACAGAATGGGGAAGACCCCTCCCATGCTCAATGTACCAGAGCACTTCAGAAGA | |
| | | | 481 | 540 |
| GenBank | M | nucl. | CCATTCAATATAGGTCTTTACAAGGGAACGATTGAGCTCACAATGACCATCTACGATGAT | |
| HR | M | nucl. | CCATTCAATATAGGTCTTTACAAGGGAACGGTTGAGCTCACAATGACCATCTACGATGAT | |
| M3 | M | nucl. | CCATTCAATATAGGTCTTTACAAGGGAACGGTTGAGCTCACAATGACCATCTACGATGAT | |
| M4 | M | nucl. | CCATTCAATATAGGTCTTTACAAGGGAACGGTTGAGCTCACAATGACCATCTACGATGAT | |

FIGURE 18-1

541 600

GenBank M nucl. GAGTCACTGGAAGCAGCTCCTATGATCTGGGATCATTTC AATTCTTCCAAATTTTCTGAT

HR M nucl. GAGTCACTGGAAGCAGCTCCTATGATCTGGGATCATTTC AATTCTTCCAAATTTTCTGAT

M3 M nucl. GAGTCACTGGAAGCAGCTCCTATGATCTGGGATCATTTC AATTCTTCCAAATTTTCTGAT

M4 M nucl. GAGTCACTGGAAGCAGCTCCTATGATCTGGGATCATTTC AATTCTTCCAAATTTTCTGAT

601 660

GenBank M nucl. TTCAGAGAGAAGGCCTTAATGTTTGGCCTGATTGTCGAGAAAAAGGCATCTGGAGCTGG

HR M nucl. TTCAGAGAGAAGGCCTTAATGTTTGGCCTGATTGTCGAGAAAAAGGCATCTGGAGCTGG

M3 M nucl. TTCAGAGAGAAGGCCTTAATGTTTGGCCTGATTGTCGAGAAAAAGGCATCTGGAGCTGG

M4 M nucl. TTCAGAGAGAAGGCCTTAATGTTTGGCCTGATTGTCGAGAAAAAGGCATCTGGAGCTGG

661 690

GenBank M nucl. GTCCTGGATTCTATCAGCCACTTCAAATGA

HR M nucl. GTCCTGGATTCTGTCAGCCACTTCAAATGA

M3 M nucl. GTCCTGGATTCTGTCAGCCACTTCAAATGA

M4 M nucl. GTCCTGGATTCTGTCAGCCACTTCAAATGA

FIGURE 18-2

| | | | | |
|---------|--------|--|---|-------------------------------|
| | | 1 | | 60 |
| GenBank | M a.a. | MSSLKKILGLKGKGKSKKLGIAPPPYEEDT | SMEYAPSAPIDKSYFGVDEMDT | YDPNQLR |
| | HR | M a.a. | MSSLKKILGLKGKGKSKKLGIAPPPYEEDT | NMEYAPSAPIDKSYFGVDEMDTHDPHQLR |
| | M4 | M a.a. | MSSLKKILGLKGKGKSKKLGIAPPPYEEDT | NMEYAPSAPIDKSYFGVDEMDTHDPHQLR |
| | M3 | M a.a. | MSSLKKILGLKGKGKSKKLGIAPPPYEEDT | NMEYAPSAPIDKSYFGVDERDTHDPHQLR |
| | | | | |
| | | 61 | | 120 |
| GenBank | M a.a. | YEKFFFTVKMTVRSNRPFRTYSDVAAAVSHWDHMYIGMAGKRPFYKILAF | LGSSNLKATP | |
| | HR | M a.a. | YEKFFFTVKMTVRSNRPFRTYSDVAAAVSHWDHMYIGMAGKRPFYKILAF | LGSSNLKATP |
| | M4 | M a.a. | YEKFFFTVKMTVRSNRPFRTYSDVAAAVSHWDHMYIGMAGKRPFYKILAF | LGSSNLKATP |
| | M3 | M a.a. | YEKFFFTVKMTVRSNRPFRTYSDVAAAVSHWDHMYIGMAGKRPFYKILAF | LGSSNLKATP |
| | | | | |
| | | 121 | | 180 |
| GenBank | M a.a. | AVLADQGGQPEYH | THCEGRAYLPHRMGKTPPMLNVPEHFRFPFNIGLYKGT | VELTMTIYDD |
| | HR | M a.a. | AVLADQGGQPEYHAHCEGRAYLPHRMGKTPPMLNVPEHFRFPFNIGLYKGT | VELTMTIYDD |
| | M4 | M a.a. | AVLADQGGQPEYHAHCEGRAYLPHRMGKTPPMLNVPEHFRFPFNIGLYKGT | VELTMTIYDD |
| | M3 | M a.a. | AVLADQGGQPEYHAHCEGRAYLPHRMGKTPPMLNVPEHFRFPFNIGLYKGT | VELTMTIYDD |
| | | | | |
| | | 181 | | 230 |
| GenBank | M a.a. | ESLEAAPMIWDHFNSSKFSDFREKALMFGLIVEKKASGAWVLD | SVSHFK. | |
| | HR | M a.a. | ESLEAAPMIWDHFNSSKFSDFREKALMFGLIVEKKASGAWVLD | SVSHFK. |
| | M4 | M a.a. | ESLEAAPMIWDHFNSSKFSDFREKALMFGLIVEKKASGAWVLD | SVSHFK. |
| | M3 | M a.a. | ESLEAAPMIWDHFNSSKFSDFREKALMFGLIVEKKASGAWVLD | SVSHFK. |

FIGURE 19

1 60
GenBank G nucl. ATGAAGTGCCTTTTGTACTTAGCTTTTATTTCATGGGGTGAATTGCAAGTTCACCATA
HR G nucl. ATGAAGTGCCTTTTGTACTTAGCTTTTATTTCATCGGGGTGAATTGCAAGTTCACCATA
M2 G nucl.
M3 G nucl. ATGAAGTGCCTTTTGTACTTAGCTTTTATTTCATCGGGGTGAATTGCAAGTTCACCATA
M4 G nucl. ATGAAGTGCCTTTTGTACTTAGCTTTTATTTCATCGGGGTGAATTGCAAGTTCACCATA

61 120
GenBank G nucl. GTTTTTCACACAACCAAAAAGGAAACTGGAAAAATGTTCTTCGAATTACCATTATTGC
HR G nucl. GTTTTTCACATACAACCAAAAAGGAAACTGGAAAAATGTTCTTCCAATTACCATTATTGC
M2 G nucl.
M3 G nucl. GTTTTTCACATACAACCAAAAAGGAAACTGGAAAAATGTTCTTCCAATTACCATTATTGC
M4 G nucl. GTTTTTCACATACAACCAAAAAGGAAACTGGAAAAATGTTCTTCCAATTACCATTATTGC

121 180
GenBank G nucl. CCGTCAAGCTCAGATTTAAATTGGCATAATGACTTAATAGGCACAGCCTACAAGTCAAA
HR G nucl. CCGTCAAGCTCAGATTTAAATTGCATTAATGACTTAATAGGCACAGCCTACAAGTCAAA
M2 G nucl.
M3 G nucl. CCGTCAAGCTCAGATTTAAATTGGCATAATGACTTAATAGGCACAGCCTACAAGTCAAA
M4 G nucl. CCGTCAAGCTCAGATTTAAATTGGCATAATGACTTAATAGGCACAGCCTACAAGTCAAA

181 240
GenBank G nucl. ATGCCCAAGAGTCACAAGGCTATTCAAGCAGACGGTTGGATGTGTCATGCTTCCAAATGG
HR G nucl. ATGCCCAAGAGTCACAAGGCTATTCAAGCAGACGGTTGGATGTGTCATGCTTCCAAATGG
M2 G nucl.
M3 G nucl. ATGCCCAAGAGTCACAAGGCTATTCAAGCAGACGGTTGGATGTGTCATGCTTCCAAATGG
M4 G nucl. ATGCCCAAGAGTCACAAGGCTATTCAAGCAGACGGTTGGATGTGTCATGCTTCCAAATGG

241 300
GenBank G nucl. GTCACTACTTGTGATTTCCGCTGGTACGGACCGAAGTATATAACACATTCCATCCGATCC
HR G nucl. GTCACTACTTGTGATTTCCGCTGGTACGGACCGAAGTATATAACACATTCCATCCGATCC
M2 G nucl.
M3 G nucl. GTCACTACTTGTGATTTCCGCTGGTACGGACCGAAGTATATAACACATTCCATCCGATCC
M4 G nucl. GTCACTACTTGTGATTTCCGCTGGTACGGACCGAAGTATATAACACATTCCATCCGATCC

301 360
GenBank G nucl. TTCACTCCATCTGTAGAACAATGCAAGGAAAGCATTGAACAAACGAAACAAGGAACCTGG
HR G nucl. TTCACTCCATCTGTAGAACAATGCAAGGAAAGCATTGAACAAACGAAACAAGGAACCTGG
M2 G nucl.
M3 G nucl. TTCACTCCATCTGTAGAACAATGCAAGGAAAGCATTGAACAAACGAAACAAGGAACCTGG
M4 G nucl. TTCACTCCATCTGTAGAACAATGCAAGGAAAGCATTGAACAAACGAAACAAGGAACCTGG

361 420
GenBank G nucl. CTGAATCCAGGCTTCCCTCCTCAAAGTTGTGGATATGCAACTGTGACGGATGCTGAAGCA
HR G nucl. CTGAATCCAGGCTTCCCTCCTCAAAGTTGTGGATATGCAACTGTGACGGATGCTGAAGCA
M2 G nucl.
M3 G nucl. CTGAATCCAGGCTTCCCTCCTCAAAGTTGTGGATATGCAACTGTGACGGATGCTGAAGCA
M4 G nucl. CTGAATCCAGGCTTCCCTCCTCAAAGTTGTGGATATGCAACTGTGACGGATGCTGAAGCA

421 480
GenBank G nucl. GGTGATTGTCCAGGTGACTCCTCACCATGTGCTGTGTTGATGAATACACAGGAGAATGGGTT
HR G nucl. GCGATTGTCCAGGTGACTCCTCACCATGTGCTGTGTTGATGAATACACAGGAGAATGGGTT
M2 G nucl.
M3 G nucl. GCGATTGTCCAGGTGACTCCTCACCATGTGCTGTGTTGATGAATACACAGGAGAATGGGTT
M4 G nucl. GCGATTGTCCAGGTGACTCCTCACCATGTGCTGTGTTGATGAATACACAGGAGAATGGGTT

FIGURE 20-1

| | | | | |
|---------|---------|---|---|-----|
| | | 481 | | 540 |
| GenBank | G nucl. | GATTCACAGTTCATCAACGGAAAATGCAGCAAT | TACATATGCCCCACTGTCCATAACTCT | |
| HR | G nucl. | GATTCACAGTTCATCAACGGAAAATGCAGCAATGACATATGCCCCACTGTCCATAACTCC | | |
| M2 | G nucl. | ..... |  |  |
| M3 | G nucl. | GATTCACAGTTCATCAACGGAAAATGCAGCAATGACATATGCCCCACTGTCCATAACTCC | | |
| M4 | G nucl. | GATTCACAGTTCATCAACGGAAAATGCAGCAATGACATATGCCCCACTGTCCATAACTCC | | |
| | | | | |
| | | 541 | | 600 |
| GenBank | G nucl. | ACAACCTGGCATTCT | GACTATAAGGTCAAAGGGCTATGTGATTCTAACCTCATTTCCATG | |
| HR | G nucl. | ACAACCTGGCATTCCGACTATAAGGTCAAAGGGCTATGTGATTCTAACCTCATTTCCATG | | |
| M2 | G nucl. | ..... |  |  |
| M3 | G nucl. | ACAACCTGGCATTCCGACTATAAGGTCAAAGGGCTATGTGATTCTAACCTCATTTCCATG | | |
| M4 | G nucl. | ACAACCTGGCATTCCGACTATAAGGTCAAAGGGCTATGTGATTCTAACCTCATTTCCATG | | |
| | | | | |
| | | 601 | | 660 |
| GenBank | G nucl. | GACATCACCTTCTTCTCAGAGGACGGAGAGCTATCATCCCT | GGAAAGGAGGGGCACAGGG | |
| HR | G nucl. | GACATCACCTTCTTCTCAGAGGACGGAGAGCTATCATCCCTAGGAAAGGAGGGGCACAGGG | | |
| M2 | G nucl. | ..... |  |  |
| M3 | G nucl. | GACATCACCTTCTTCTCAGAGGACGGAGAGCTATCATCCCTAGGAAAGGAGGGGCACAGGG | | |
| M4 | G nucl. | GACATCACCTTCTTCTCAGAGGACGGAGAGCTATCATCCCTAGGAAAGGAGGGGCACAGGG | | |
| | | | | |
| | | 661 | | 720 |
| GenBank | G nucl. | TTCAGAAGTAACTACTTTGCTTATGAACTGGAG | CAAGGCCTGCAAAATGCAATACTGCT | |
| HR | G nucl. | TTCAGAAGTAACTACTTTGCTTATGAACTGGAGACAAGGCCTGCAAAATGCAGTACTGCT | | |
| M2 | G nucl. | ..... |  |  |
| M3 | G nucl. | TTCAGAAGTAACTACTTTGCTTATGAACTGGAGACAAGGCCTGCAAAATGCAGTACTGCT | | |
| M4 | G nucl. | TTCAGAAGTAACTACTTTGCTTATGAACTGGAGACAAGGCCTGCAAAATGCAGTACTGCT | | |
| | | | | |
| | | 721 | | 780 |
| GenBank | G nucl. | AAGCA | TTGGGGAGTCAGACTCCCATCAGGTGTCTGGTTCGAGATGGCTGATAAGGATCTC | |
| HR | G nucl. | AAGCGTTGGGGAGTCAGACTCCCATCAGGTGTCTGGTTCGAGATGGCTGATAAGGATCTC | | |
| M2 | G nucl. | ..... |  |  |
| M3 | G nucl. | AAGCA | TTGGGGAGTCAGACTCCCATCAGGTGTCTGGTTCGAGATGGCTGATAAGGATCTC | |
| M4 | G nucl. | AAGCGTTGGGGAGTCAGACTCCCATCAGGTGTCTGGTTCG | GATGGCTGATAAGGATCTC | |
| | | | | |
| | | 781 | | 840 |
| GenBank | G nucl. | TTTGCTGCAGCCAGATTCCCTGAATGCCCAGAAGGGTCAAGTATCTCTGCTCCATCTCAG | | |
| HR | G nucl. | TTTGCTGCAGCCAGATTCCCTGAATGCCCAGAAGGGTCAAGTATCTCTGCTCCATCTCAG | | |
| M2 | G nucl. | ..... | CCATCTCAG | |
| M3 | G nucl. | TTTGCTGCAGCCAGATTCCCTGAATGCCCAGAAGGGTCAAGTATCTCTGCTCCATCTCAG | | |
| M4 | G nucl. | TTTGCTGCAGCCAGATTCCCTGAATGCCCAGAAGGGTCAAGTATCTCTGCTCCATCTCAG | | |
| | | | | |
| | | 841 | | 900 |
| GenBank | G nucl. | ACCTCAGTGGATGTAAGTCT | AATTCAGGACGTTGAGAGGATCTTGATTATTCCCTCTGC | |
| HR | G nucl. | ACCTCAGTGGATGTAAGTCTCATTTCAGGACGTTGAGAGGATCTTG | ..... |  |
| M2 | G nucl. | ACCTCAGTGGATGTAAGTCTCATTTCAGGACGTTGAGAGGATCTTGATTATTCCCTCTGC | | |
| M3 | G nucl. | ACCTCAGTGGATGTAAGTCTCATTTCAGGACGTTGAGAGGATCTTGATTATTCCCTCTGC | | |
| M4 | G nucl. | ACCTCAGTGGATGTAAGTCTCATTTCAGGACGTTGAGAGGATCT | ..... |  |

FIGURE 20-2

901 960

GenBank G nucl. CAAGAAACCTGGAGCAAAATCAGAGCGGGTCTTCCATCTCTCCAGTGGATCTCAGCTAT

HR G nucl.

M2 G nucl. CAAGAAACCTGGAGCAAAATCAGAGCGGGTCTTCCATCTCTCCAGTGGATCTCAGCTAT

M3 G nucl. CAAGAAACCTGGAGCAAAATCAGAGCGGGTCTTCCATCTCTCCAGTGGATCTCAGCTAT

M4 G nucl.

961 1020

GenBank G nucl. CTTGCTCCTAAAAACCCAGGAACCGGTCTGCTTTACCATAATCAATGGTACCCTAAAA

HR G nucl.

M2 G nucl. CTTGCTCCTAAAAACCCAGGAACCGGTCTGCTTTACCATAATCAATGGTACCCTAAAA

M3 G nucl. CTTGCTCCTAAAAACCCAGGAACCGGTCTGCTTTACCATAATCAATGGTACCCTAAAA

M4 G nucl.

1021 1080

GenBank G nucl. TACTTTGAGACCAGATACATCAGAGTCGATATTGCTGCTCCAATCCTCTCAAGAATGGTC

HR G nucl.

M2 G nucl. TACTTTGAGACCAGATACATCAGAGTCGATATTGCTGCTCCAATCCTCTCAAGAATGGTC

M3 G nucl. TACTTTGAGACCAGATACATCAGAGTCGATATTGCTGCTCCAATCCTCTCAAGAATGGTC

M4 G nucl. TACTTTGAGACCAGATACATCAGAGTCGATATTGCTGCTCCAATCCTCTCAAGAATGGTC

1081 1140

GenBank G nucl. GGAATGATCAGTGGAACCTACCACAGAAAGGGAACCTGTGGGATGACTGGGCACCATATGAA

HR G nucl.

M2 G nucl. GGAATGATCAGTGGAACCTACCACAGAAAGGGAACCTGTGGGATGACTGGGCTCCATATGAA

M3 G nucl. GGAATGATCAGTGGAACCTACCACAGAAAGGGAACCTGTGGGATGACTGGGCTCCATATGAA

M4 G nucl. GGAATGATCAGTGGAACCTACCACAGAAAGGGAACCTGTGGGATGACTGGGCTCCATATGAA

1141 1200

GenBank G nucl. GACGTGGAAATTGGACCCAATGGAGTTCTGAGGACCAGTTCAGGATATAAGTTTCCTTTA

HR G nucl.

M2 G nucl. GACGTGGAAATTGGACCCAATGGAGTTCTGAGGACCAGTTCAGGATATAAGTTTCCTTTA

M3 G nucl. GACGTGGAAATTGGACCCAATGGAGTTCTGAGGACCAGTTCAGGATATAAGTTTCCTTTA

M4 G nucl. GACGTGGAAATTGGACCCAATGGAGTTCTGAGGACCAGTTCAGGATATAAGTTTCCTTTA

1201 1260

GenBank G nucl. TACATGATTGGACATGGTATGTTGGACTCCGATCTTCATCTTAGCTCAAAGGCTCAGGTG

HR G nucl.

M2 G nucl. TATATGATTGGACATGGTATGTTGGACTCCGATCTTCATCTTAGCTCAAAGGCTCAGGTG

M3 G nucl. TATATGATTGGACATGGTATGTTGGACTCCGATCTTCATCTTAGCTCAAAGGCTCAGGTG

M4 G nucl. TATATGATTGGACATGGTATGTTGGACTCCGATCTTCATCTTAGCTCAAAGGCTCAGGTG

1261 1320

GenBank G nucl. TTTGAACATCCTCACATTCAAGACGCTGCTTCGCACTTCCTGATGATGAGACTTTATTT

HR G nucl.

M2 G nucl. TTTGAACATCCTCACATTCAAGACGCTGCTTCGCACTTCCTGATGATGAGACTTTATTT

M3 G nucl. TTTGAACATCCTCACATTCAAGACGCTGCTTCGCACTTCCTGATGATGAGACTTTATTT

M4 G nucl. TTTGAACATCCTCACATTCAAGACGCTGCTTCGCACTTCCTGATGATGAGACTTTATTT

FIGURE 20-3

1321 1380
GenBank G nucl. TTTGGTGATACTGGGCTATCCAAAAATCCAATCGAGTTGTAGAAGGTTGGTTCAGTAGT
HR G nucl.
M2 G nucl. TTTGGTGATACTGGGCTATCCAAAAATCCAATCGAGTTTGTAGAAGGTTGGTTCAGTAGT
M3 G nucl. TTTGGTGATACTGGGCTATCCAAAAATCCAATCGAGTTTGTAGAAGGTTGGTTCAGTAGT
M4 G nucl. TTTGGTGATACTGGGCTATCCAAAAATCCAATCGAGTTTGTAGAAGGTTGGTTCAGTAGT

1381 1440
GenBank G nucl. TGGAAAAGCTCTATTGCCTCTTTTTTCTTTATCATAGGGTTAATCATTGGACTATTCTTG
HR G nucl.
M2 G nucl. TGGAAAGAGCTCTATTGCCTCTTTTTTCTTTATCATAGGGTTAATCATTGGACTATTCTTG
M3 G nucl. TGGAAAGAGCTCTATTGCCTCTTTTTTCTTTATCATAGGGTTAATCATTGGACTATTCTTG
M4 G nucl. TGGAAAGAGCTCTATTGCCTCTTTTTTCTTTATCATAGGGTTAATCATTGGACTATTCTTG

1441 1500
GenBank G nucl. GTTCTCCGAGTTGGTATCCATCTTTGCATTAAATTAAAGCACACCAAGAAAAGACAGATT
HR G nucl.
M2 G nucl. GTTCTCCGAGTTGGTATTTATCTTTGCATTAAATTAAAGCACACCAAGAAAAGACAGATT
M3 G nucl. GTTCTCCGAGTTGGTATTTATCTTTGCATTAAATTAAAGCACACCAAGAAAAGACAGATT
M4 G nucl. GTTCTCCGAGTTGGTATTTATCTTTGCATTAAATTAAAGCACACCAAGAAAAGACAGATT

1501 1536
GenBank G nucl. TATACAGACATAGAGATGAACCGACTTGGAAAGTAA
HR G nucl.
M2 G nucl. TATACAGACATAGAGATGAACCGACTTGGGAAGTAA
M3 G nucl. TATACAGACATAGAGATGAACCGACTTGGGAAGTAA
M4 G nucl. TATACAGACATAGAGATGAACCGACTTGGGAAGTAA

FIGURE 20-4

| | | | |
|---------|---------|--|-----|
| | | 1 | 60 |
| GenBank | G a. a. | MKCLLYLAFLFIGVNCKFTIVFPN Q KGWKNVPSNYHYCPSSSDLNWHNDLIGTA T QVK | |
| HR | G a. a. | MKCLL X LAFLFIGVNCKFTIVFPYN Q KGWKNVPSNYHYCPSSSDLN X HNDLIGTALQVK | |
| M2 | G a. a. | ..... |  |
| M3 | G a. a. | MKCLLYLAFLFIGVNCKFTIVFPYN Q KGWKNVPSNYHYCPSSSDLNWHNDLIGTALQVK | |
| M4 | G a. a. | MKCLLYLAFLFIGVNCKFTIVFPYN Q KGWKNVPSNYHYCPSSSDLNWHNDLIGTALQVK | |
| | | 61 | 120 |
| GenBank | G a. a. | MPKSHKAIQADGWMCHASKWVTTCDFRWYGPKYIT Q SIRSFTPSVEQCKESIEQTKQGTW | |
| HR | G a. a. | MPKSHKAIQADGWMCHASKWVTTCDFRWYGPKYITHSIRSFTPSVEQCKESIEQTKQGTW | |
| M2 | G a. a. | ..... |  |
| M3 | G a. a. | MPKSHKAIQADGWMCHASKWVTTCDFRWYGPKYITHSIRSFTPSVEQCKESIEQTKQGTW | |
| M4 | G a. a. | MPKSHKAIQADGWMCHASKWVTTCDFRWYGPKYITHSIRSFTPSVEQCKESIEQTKQGTW | |
| | | 121 | 180 |
| GenBank | G a. a. | LNPGFPPQSCGYATVTDAAE V IVQVTPHHVLVDEYTG EWVDSQFINGKCSN V ICPTVHNS | |
| HR | G a. a. | LNPGFPPQSCGYATVTDAAE A IVQVTPHHVLVDEYTG EWVDSQFINGKCSNDICPTVHNS | |
| M2 | G a. a. | ..... |  |
| M3 | G a. a. | LNPGFPPQSCGYATVTDAAE A IVQVTPHHVLVDEYTG EWVDSQFINGKCSNDICPTVHNS | |
| M4 | G a. a. | LNPGFPPQSCGYATVTDAAE A IVQVTPHHVLVDEYTG EWVDSQFINGKCSNDICPTVHNS | |
| | | 181 | 240 |
| GenBank | G a. a. | TTWHS DYKVKGLCDSNLISMDITFFSEDGELSSLGKEGTGFRSNYFAYETG C KACKMQYC | |
| HR | G a. a. | TTWHS DYKVKGLCDSNLISMDITFFSEDGELSSLGKEGTGFRSNYFAYETGD K ACKMQYC | |
| M2 | G a. a. | ..... |  |
| M3 | G a. a. | TTWHS DYKVKGLCDSNLISMDITFFSEDGELSSLGKEGTGFRSNYFAYETGD K ACKMQYC | |
| M4 | G a. a. | TTWHS DYKVKGLCDSNLISMDITFFSEDGELSSLGKEGTGFRSNYFAYETGD K ACKMQYC | |
| | | 241 | 300 |
| GenBank | G a. a. | KHWGVRLPSGVWFEMADKDLFAAARFPECPEGSSISAPSQTSVDVSLIQDVERILDYSLC | |
| HR | G a. a. | K W GVRLPSGVWFEMADKDLFAAARFPECPEGSSISAPSQTSVDVSLIQDVERIL..... | |
| M2 | G a. a. |PSQTSVDVSLIQDVERILDYSLC | |
| M3 | G a. a. | KHWGVRLPSGVWFEMADKDLFAAARFPECPEGSSISAPSQTSVDVSLIQDVERILDYSLC | |
| M4 | G a. a. | K W GVRLPSGVWF C MA DKDLFAAARFPECPEGSSISAPSQTSVDVSLIQDVERI..... | |
| | | 301 | 360 |
| GenBank | G a. a. | QETWSKIRAGLPISPVDLSYLAPKNPGTGPAFTIINGTLKYFETRYIRVDIAAPILSRMV | |
| HR | G a. a. | ..... |  |
| M2 | G a. a. | QETWSKIRAGLPISPVDLSYLAPKNPGTG P FTIINGTLKYFETRYIRVDIAAPILSRMV | |
| M3 | G a. a. | QETWSKIRAGLPISPVDLSYLAPKNPGTGPAFTIINGTLKYFETRYIRVDIAAPILSRMV | |
| M4 | G a. a. |YFETRYIRVDIAAPILSRMV | |
| | | 361 | 420 |
| GenBank | G a. a. | GMISGTTTERELWDDWAPYEDVEIGPNGVLR TSSGYKFPLYMIGHGMLDSDLHLSSKAQV | |
| HR | G a. a. | ..... |  |
| M2 | G a. a. | GMISGTTTERELWDDWAPYEDVEIGPNGVLR TSSGYKFPLYMIGHGMLDSDLHLSSKAQV | |
| M3 | G a. a. | GMISGTTTERELWDDWAPYEDVEIGPNGVLR TSSGYKFPLYMIGHGMLDSDLHLSSKAQV | |
| M4 | G a. a. | GMISGTTTERELWDDWAPYEDVEIGPNGVLR TSSGYKFPLYMIGHGMLDSDLHLSSKAQV | |

FIGURE 21-1

| | | |
|-----------------|---|-----|
| GenBank L nucl. | 1 | 60 |
| HR L nucl. | ATGGAAGTCCACGATTTTGAGACCGACGAGTTCAATGATTTCAATGAAGATGACTATGCC | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | ATGGAAGTCCACGATTTTGAGACCGACGAGTTCAATGATTTCAATGAAGATGACTATGCC | |
| GenBank L nucl. | 61 | 120 |
| HR L nucl. | ACAAGAGAATTCTCTGAATCCCGATGAGCGCATGACGTACTTGAATCATGCTGATTACAAT | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | ACAAGAGAATTCTCTGAATCCCGATGAGCGCATGACGTACTTGAATCATGCTGATTACAAT | |
| GenBank L nucl. | 121 | 180 |
| HR L nucl. | TTGAATTCTCCTCTAATTAGTGATGATATTGACAATTTGATCAGGAAATTCAATTCTCTT | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | TTGAATTCTCCTCTAATTAGTGATGATATTGACAATTTGATCAGGAAATTCAATTCTCTT | |
| GenBank L nucl. | 181 | 240 |
| HR L nucl. | CCGATTCCCTCGATGTGGGATAGTAAGAACTGGGATGGAGTTCTTGAGATGTTAACATCA | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | CCGATTCCCTCGATGTGGGATAGTAAGAACTGGGATGGAGTTCTTGAGATGTTAACATCA | |
| GenBank L nucl. | 241 | 300 |
| HR L nucl. | TGTCAAGCCAATCCCATCTCAACATCTCAGATGCATAAATGGATGGGAAGTTGGTTAATG | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | TGTCAAGCCAATCCCATCTCAACATCTCAGATGCATAAATGGATGGGAAGTTGGTTAATG | |
| GenBank L nucl. | 301 | 360 |
| HR L nucl. | TCTGATAATCATGATGCCAGTCAAGGGTATAGTTTTTTTACATGAAGTGGACAAAGAGGCA | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | TCTGATAATCATGATGCCAGTCAAGGGTATAGTTTTTTTACATGAAGTGGACAAAGAGGCA | |
| GenBank L nucl. | 361 | 420 |
| HR L nucl. | GAAATAACATTTGACGTGGTGGAGACCTTCATCCGCGGCTGGGGCAACAAACCAATTGAA | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | GAAATAACATTTGACGTGGTGGAGACCTTCATCCGCGGCTGGGGCAACAAACCAATTGAA | |
| GenBank L nucl. | 421 | 480 |
| HR L nucl. | TACATCAAAAAGGAAAGATGGACTGACTCATTCAAAATTCTCGCTTATTTGTGTCAAAAG | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | TACATCAAAAAGGAAAGATGGACTGACTCATTCAAAATTCTCGCTTATTTGTGTCAAAAG | |
| GenBank L nucl. | 481 | 540 |
| HR L nucl. | TTTTTGGACTTACACAAGTTGACATTAATCTTAAATGCTGTCTCTGAGGTGGAATTGCTC | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | TTTTTGGACTTACACAAGTTGACATTAATCTTAAATGCTGTCTCTGAGGTGGAATTGCTC | |

FIGURE 22-1

| | | |
|-----------------|---|------|
| | 541 | 600 |
| GenBank L nucl. | AACTTGGCGAGGACTTTCAAAGGCAAAGTCAGAAGAAGTTCTCATGGAACGAACATATGC | |
| HR L nucl. | ..... |  |
| M2 L nucl. | ..... |  |
| M4 L nucl. | AACTTGGCGAGGACTTTCAAAGGCAAAGTCAGAAGAAGTTCTCATGGAACGAACATATGC | |
| | 601 | 660 |
| GenBank L nucl. | AGGATTAGGGTTCCCAGCTTGGGTCCTACTTTTATTTTCAGAAGGATGGGCTTACTTCAAG | |
| HR L nucl. | ..... |  |
| M2 L nucl. | ..... |  |
| M4 L nucl. | AGGCTTAGGGTTCCCAGCTTGGGTCCTACTTTTATTTTCAGAAGGATGGGCTTACTTCAAG | |
| | 661 | 720 |
| GenBank L nucl. | AAACTTGATATTCTAATGGACCGAAACTTTCTGTTAATGGTCAAAGATGTGATTATAGGG | |
| HR L nucl. | ..... |  |
| M2 L nucl. | ..... |  |
| M4 L nucl. | AAACTTGATATTCTAATGGACCGAAACTTTCTGTTAATGGTCAAAGATGTGATTATAGGG | |
| | 721 | 780 |
| GenBank L nucl. | AGGATGCAAACGGTGCTATCCATGGTATGTAGAATAGACAACCTGTTCTCAGAGCAAGAC | |
| HR L nucl. | ..... |  |
| M2 L nucl. | ..... |  |
| M4 L nucl. | AGGATGCAAACGGTGCTATCCATGGTATGTAGAATAGACAACCTGTTCTCAGAGCAAGAC | |
| | 781 | 840 |
| GenBank L nucl. | ATCTTCTCCCTTCTAAATATCTACAGAATTGGAGATAAAATTTGTGGAGAGGCAGGGAAAT | |
| HR L nucl. | ..... |  |
| M2 L nucl. | ..... |  |
| M4 L nucl. | ATCTTCTCCCTTCTAAATATCTACAGAATTGGAGATAAAATTTGTGGAGAGGCAGGGAAAT | |
| | 841 | 900 |
| GenBank L nucl. | TTTTCTTATGACTTGATTAAAATGGTGGAACCGATATGCAACTTGAGGCTGATGAAATTA | |
| HR L nucl. | ..... |  |
| M2 L nucl. | ..... |  |
| M4 L nucl. | TTTTCTTATGACTTGATTAAAATGGTGGAACCGATATGCAACTTGAGGCTGATGAAATTA | |
| | 901 | 960 |
| GenBank L nucl. | GCAAGAGAATCAAGGCCTTTAGTCCCACAATTCCCTCATTTTGGAAAATCATATCAAGACT | |
| HR L nucl. | ..... |  |
| M2 L nucl. | ..... |  |
| M4 L nucl. | GCAAGAGAATCAAGGCCTTTAGTCCCACAATTCCCTCATTTTGGAAAATCATATCAAGACT | |
| | 961 | 1020 |
| GenBank L nucl. | TCTGTTGATGAAGGGGCAAAAATTGACCGAGGTATAAGATTCCCTCCATGATCAGATAATG | |
| HR L nucl. | ..... |  |
| M2 L nucl. | ..... |  |
| M4 L nucl. | TCTGTTGATGAAGGGGCAAAAATTGACCGAGGTATAAGATTCCCTCCATGATCAGATAATG | |

FIGURE 22-2

| | | |
|-----------------|---|------|
| GenBank L nucl. | 1021 | 1080 |
| HR L nucl. | AGTGTGAAAACAGTGGATCTCACACTGGTGATTTATGGATCGTTCAGACATTGGGGTCAT | |
| M2 L nucl. |CATTGGGGTCAT | |
| M4 L nucl. | AGTGTGAAAACAGTGGATCTCACACTGGTGATTTATGGATCGTTCAGACATTGGGGTCAT | |
| GenBank L nucl. | 1081 | 1140 |
| HR L nucl. | CCTTTTATAGATTATTACCTGGACTAGAAAAATTACATTCCCAAGTAACCATGAAGAAA | |
| M2 L nucl. | CCTTTTATAGATTATTACGCTGGCTAGAAAAATTACATTCCCAAGTACCATGAAGAAA | |
| M4 L nucl. | CCTTTTATAGATTATTACGCTGGACTAGAAAAATTACATTCCCAAGTAACCATGAAGAAA | |
| GenBank L nucl. | 1141 | 1200 |
| HR L nucl. | GATATTGATGTGTCATATGCAAAAGCACTTGCAAGTGATTTAGCTCGGATTGTTCTATTT | |
| M2 L nucl. | GATATTGATGTGTCATATGCRAAAGCACTTGCAAGTGATTTAGCTCGGATTGTTCTATTT | |
| M4 L nucl. | GATATTGATGTGTCATATGCAAAAGCACTTGCAAGTGATTTAGCTCGGATTGTTCTATTT | |
| GenBank L nucl. | 1201 | 1260 |
| HR L nucl. | CAACAGTTCAATGATCATATAAAAGTGGTTCGTGAATGGAGACTTGCTCCCTCATGATCAT | |
| M2 L nucl. | CAACAGTTCAATGATCATAMAAAGTGGTTCGTGAATGGAGACTTGCTCCCTCATGATCAT | |
| M4 L nucl. | CAACAGTTCAATGATCATATAAAAGTGGTTCGTGAATGGAGACTTGCTCCCTCATGATCAT | |
| GenBank L nucl. | 1261 | 1320 |
| HR L nucl. | CCCTTTAAAAGTCATGTTAAAGAAAATACATGGCCACAGCTGCTCAAGTTCAAGATTTT | |
| M2 L nucl. | CCCTTTAAAAGTCATGTTAAAGAAAATACATGGCCACAGCTGCTCAAGTTCAAGATTTT | |
| M4 L nucl. | CCCTTTAAAAGTCATGTTAAAGAAAATACATGGCCACAGCTGCTCAAGTTCAAGATTTT | |
| GenBank L nucl. | 1321 | 1380 |
| HR L nucl. | GGAGATAAATGGCATGAACCTCCGCTGATTAAATGTTTTGAAATACCCGACTTACTAGAC | |
| M2 L nucl. | GGAGATAAATGGCATGAACCTCCGCTGATTAAATGTTTTGAAATACCCGACTTACTAGAC | |
| M4 L nucl. | GGAGATAAATGGCATGAACCTCCGCTGATTAAATGTTTTGAAATACCCGACTTACTAGAC | |
| GenBank L nucl. | 1381 | 1440 |
| HR L nucl. | CCATCGATAATATACTCTGACAAAAGTCATTCAATGAATAGGTCAGAGGTGTTGAAACAT | |
| M2 L nucl. | CCATCGATAATATACTCTGACAAAAGTCATTCAATGAATAGGTCAGAGGTGTTGAAACAT | |
| M4 L nucl. | CCATCGATAATATACTCTGACAAAAGTCATTCAATGAATAGGTCAGAGGTGTTGAAACAT | |
| GenBank L nucl. | 1441 | 1500 |
| HR L nucl. | GTCCGAATGAATCCGAACACTCCTATCCCTAGTAAAAAGGTGTTGCAGACTATGTTGGAC | |
| M2 L nucl. | GTCCGAATGAATCCGAACACTCCTATCCCTAGTAAAAAGGTGTTGCAGACTATGTTGGAC | |
| M4 L nucl. | GTCCGAATGAATCCGAACACTCCTATCCCTAGTAAAAAGGTGTTGCAGACTATGTTGGAC | |

FIGURE 22-3

| | 2041 | 2100 |
|-----------------|---|-------------------------------------|
| GenBank L nucl. | GAAGGTCTACGGCAAAAAGGATGGA | TATCCTCAATCTACTGGTTATTCAAAGAGAGGGCT |
| HR L nucl. | GAAGGTCTACGGCAAAAAGGATGAGATATCCTCAATCTACTGGTTATTCAAAGAGAGGGCT | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | GAAGGTCTACGGCAAAAAGGATGGAGTATCCTCAATCTACTGGTTATTCAAAGAGAGGGCT | |
| | 2101 | 2160 |
| GenBank L nucl. | AAAATCAGAAACACTGCTGTCAAAGTCTTGGCACAAGGTGATAATCAAGTTATTTGCACA | |
| HR L nucl. | AAAATCAGAAACACTGCTGTCAAAGTCTTGGCACAAGGTGATAATCAAGTTATTTGCACA | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | AAAATCAGAAACACTGCTGTCAAAGTCTTGGCACAAGGTGATAATCAAGTTATTTGCACA | |
| | 2161 | 2220 |
| GenBank L nucl. | CAGTATAAAACGAAGAAATCGAGAAACGTTGTAGAATTACAGGGTGCTCTCAATCAAATG | |
| HR L nucl. | CAGTATAAAACGAAGAAATCGAGAAACGTTGTAGAATTACAGGGTGCTCTCAATCAAATG | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | CAGTATAAAACGAAGAAATCGAGAAACGTTGTAGAATTACAGGGTGCTCTCAATCAAATG | |
| | 2221 | 2280 |
| GenBank L nucl. | GTTTCTAATAATGAGAAAATTATGACTGCAATCAAAATAGGGACAGGGAAGTTAGGACTT | |
| HR L nucl. | GTTTCTAATAATGAGAAAATTATGACTGCAATCAAAATAGGGACAGGGAAGTTAGGACTT | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | GTTTCTAATAATGAGAAAATTATGACTGCAATCAAAATAGGGACAGGGAAGTTAGGACTT | |
| | 2281 | 2340 |
| GenBank L nucl. | TTGATAAATGACGATGAGACTATGCAATCTGCAGATTACTTGAATTATGGAAAAATACCG | |
| HR L nucl. | TTGATAAATGACGATGAGACTATGCAATCTGCAGATTACTTGAATTATGGAAAAATACCG | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | TTGATAAATGACGATGAGACTATGCAATCTGCAGATTACTTGAATTATGGAAAAATACCG | |
| | 2341 | 2400 |
| GenBank L nucl. | ATTTTCCGTGGAGTGATTAGAGGGTTAGAGACCAAGAGATGGTCACGAGTGACTTGTGTC | |
| HR L nucl. | ATTTTCCGTGGAGTGATTAGAGGGTTAGAGACCAAGAGATGGTCACGAGTGACTTGTGTC | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | ATTTTCCGTGGAGTGATTAGAGGGTTAGAGACCAAGAGATGGTCACGAGTGACTTGTGTC | |
| | 2401 | 2460 |
| GenBank L nucl. | ACCAATGACCAAATACCCACTTGTGCTAATATAATGAGCTCAGTTTCCACAAATGCTCTC | |
| HR L nucl. | ACCAATGACCAAATACCCACTTGTGCTAATATAATGAGCTCAGTTTCCACAAATGCTCTC | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | ACCAATGACCAAATACCCACTTGTGCTAATATAATGAGCTCAGTTTCCACAAATGCTCTC | |
| | 2461 | 2520 |
| GenBank L nucl. | ACCGTAGCTCATTTTGCTGAGAACCCAATCAATGCCATGATACAGTACAATTATTTTGGG | |
| HR L nucl. | ACCGTAGCTCATTTTGCTGAGAACCCAATCAATGCCATGATACAGTACAATTATTTTGGG | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | ACCGTAGCTCATTTTGCTGAGAACCCAATCAATGCCATGATACAGTACAATTATTTTGGG | |
| | 2521 | 2580 |
| GenBank L nucl. | ACATTTGCTAGACTCTTGTTGATGATGCATGATCCTGCTCTTCGTCAATCATTGTATGAA | |
| HR L nucl. | ACATTTGCTAGACTCTTGTTGATGATGCATGATCCTGCTCTTCGTCAATCATTGTATGAA | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | ACATTTGCTAGACTCTTGTTGATGATGCATGATCCTGCTCTTCGTCAATCATTGTATGAA | |

FIGURE 22-5

| | | |
|-----------------|---|------|
| GenBank L nucl. | 2581 | 2640 |
| HR L nucl. | GTTCAAGATAAGATAACCGGGCTTGCACAGTTCTACTTTCAAATACGCCATGTTGTATTTG | |
| M2 L nucl. | GTTCAAGATAAGATAACCGGGCTTGCACAGTTCTACTTTCAAATACGCCATGTTGTATTTG | |
| M4 L nucl. | ..... |  |
| | GTTCAAGATAAGATAACCGGGCTTGCACAGTTCTACTTTCAAATACGCCATGTTGTATTTG | |
| GenBank L nucl. | 2641 | 2700 |
| HR L nucl. | GACCCTTCCATTGGAGGAGTGTCTGGGCATGTCTTTGTCCAGGTTTTTGATTAGAGCCTTC | |
| M2 L nucl. | GACCCTTCCATTGGAGGAGTGTCTGGGCATGTCTTTGTCCAGGTTTTTGATTAGAGCCTTC | |
| M4 L nucl. | ..... |  |
| | GACCCTTCCATTGGAGGAGTGTCTGGGCATGTCTTTGTCCAGGTTTTTGATTAGAGCCTTC | |
| GenBank L nucl. | 2701 | 2760 |
| HR L nucl. | CCAGATCCCGTAACAGAAAGTCTCTCATTCTGGAGATTCATCCATGTACATGCTCGAAGT | |
| M2 L nucl. | CCAGATCCCGTAACAGAAAGTCTCTCATTCTGGAGATTCATCCATGTACATGCTCGAAGT | |
| M4 L nucl. | ..... |  |
| | CCAGATCCCGTAACAGAAAGTCTCTCATTCTGGAGATTCATCCATGTACATGCTCGAAGT | |
| GenBank L nucl. | 2761 | 2820 |
| HR L nucl. | GAGCATCTGAAGGAGATGAGTGCAGTATTTGGAAACCCCGAGATAGCCAAGTTTCGAATA | |
| M2 L nucl. | GAGCATCTGAAGGAGATGAGTGCAGTATTTGGAAACCCCGAGATAGCCAAGTTTCGAATA | |
| M4 L nucl. | ..... |  |
| | GAGCATCTGAAGGAGATGAGTGCAGTATTTGGAAACCCCGAGATAGCCAAGTTTCGAATA | |
| GenBank L nucl. | 2821 | 2880 |
| HR L nucl. | ACTCACATAGACAAGCTAGTAGAAGATCCAACCTCTCTGAACATCGCTATGGGAATGAGT | |
| M2 L nucl. | ACTCACATAGACAAGCTAGTAGAAGATCCAACCTCTCTGAACATCGCTATGGGAATGAGT | |
| M4 L nucl. | ..... |  |
| | ACTCACATAGACAAGCTAGTAGAAGATCCAACCTCTCTGAACATCGCTATGGGAATGAGT | |
| GenBank L nucl. | 2881 | 2940 |
| HR L nucl. | CCAGCGAACTTGTTAAAGACTGAGGTAAAAAATGCTTAATCGAATCAAGACAAACCATC | |
| M2 L nucl. | CCAGCGAACTTGTTAAAGACTGAGGTAAAAAATGCTTAATCGAATCAAGACAAACCATC | |
| M4 L nucl. | ..... |  |
| | CCAGCGAACTTGTTAAAGACTGAGGTAAAAAATGCTTAATCGAATCAAGACAAACCATC | |
| GenBank L nucl. | 2941 | 3000 |
| HR L nucl. | AGGAACCAGGTGATTAAGGATGCAACCATATATTTGTATCATGAAGAGGATCGGCTCAGA | |
| M2 L nucl. | AGGAACCAGGTGATTAAGGATGCAACCATATATTTGTATCATGAAGAGGATCGGCTCAGA | |
| M4 L nucl. | ..... |  |
| | AGGAACCAGGTGATTAAGGATGCAACCATATATTTGTATCATGAAGAGGATCGGCTCAGA | |
| GenBank L nucl. | 3001 | 3060 |
| HR L nucl. | AGTTTCTTATGGTCAATAAATCCTCTGTTCCCTAGATTTTTTAAGTGAATTCAAATCAGGC | |
| M2 L nucl. | AGTTTCTTATGGTCAATAAATCCTCTGTTCCCTAGATTTTTTAAGTGAATTCAAATCAGGC | |
| M4 L nucl. | ..... |  |
| | AGTTTCTTATGGTCAATAAATCCTCTGTTCCCTAGATTTTTTAAGTGAATTCAAATCAGGC | |
| GenBank L nucl. | 3061 | 3120 |
| HR L nucl. | ACTTTTTTGGGAGTCGCAGACGGGCTCATCAGTCTATTTCAAATCTCGTACTATTTCGG | |
| M2 L nucl. | ACTTTTTTGGGAGTCGCAGACGGGCTCATCAGTCTATTTCAAATCTCGTACTATTTCGG | |
| M4 L nucl. | ..... |  |
| | ACTTTTTTGGGAGTCGCAGACGGGCTCATCAGTCTATTTCAAATCTCGTACTATTTCGG | |

FIGURE 22-6

| | | |
|-----------------|---|------|
| GenBank L nucl. | 3121 | 3180 |
| HR L nucl. | AACTCCTTTAAGAAAAAGTATCATAGGGAATTGGATGATTTGATTGTGAGGAGTGAGGTA | |
| M2 L nucl. | AACTCCTTTAAGAAAAAGTATCATAGGGAATTGGATGATTTGATTGTGAGGAGTGAGGTA | |
| M4 L nucl. | AACTCCTTTAAGAAAAAGTATCATAGGGAATTGGATGATTTGATTGTGAGGAGTGAGGTA | |
| GenBank L nucl. | 3181 | 3240 |
| HR L nucl. | TCCTCTTTGACACATTTAGGGAAACTTCATTTGAGAAGGGGATCATGTAAAATGTGGACA | |
| M2 L nucl. | TCCTCTTTGACACATTTAGGGAAACTTCATTTGAGAAGGGGATCATGTAAAATGTGGACA | |
| M4 L nucl. | TCCTCTTTGACACATTTAGGGAAACTTCATTTGAGAAGGGGATCATGTAAAATGTGGACA | |
| GenBank L nucl. | 3241 | 3300 |
| HR L nucl. | TGTTTCAGCTACTCATGCTGACACATTAAGATACAAATCCTGGGGCCGTACAGTTATTGGG | |
| M2 L nucl. | TGTTTCAGCTACTCATGCTGACACATTAAGATACAAATCCTGGGGCCGTACAGTTATTGGG | |
| M4 L nucl. | TGTTTCAGCTACTCATGCTGACACATTAAGATACAAATCCTGGGGCCGTACAGTTATTGGG | |
| GenBank L nucl. | 3301 | 3360 |
| HR L nucl. | ACAACGTACCCCATCCATTAGAAATGTTGGGTCCACAACATCGAAAAGAGACTCCTTGT | |
| M2 L nucl. | ACAACGTACCCCATCCATTAGAAATGTTGGGTCCACAACATCGAAAAGAGACTCCTTGT | |
| M4 L nucl. | ACAACGTACCCCATCCATTAGAAATGTTGGGTCCACAACATCGAAAAGAGACTCCTTGT | |
| GenBank L nucl. | 3361 | 3420 |
| HR L nucl. | GCACCATGTAACACATCAGGGTTCAATTATGTTTCTGTGCATTGTCCAGACGGGATCCAT | |
| M2 L nucl. | GCACCATGTAACACATCAGGGTTCAATTATGTTTCTGTGCATTGTCCAGACGGGATCCAT | |
| M4 L nucl. | GCACCATGTAACACATCAGGGTTCAATTATGTTTCTGTGCATTGTCCAGACGGGATCCAT | |
| GenBank L nucl. | 3421 | 3480 |
| HR L nucl. | GACGTCTTTAGTTCACGGGGACCATTGCCTGCTTATCTAGGGTCTAAAACATCTGAATCT | |
| M2 L nucl. | GACGTCTTTAGTTCACGGGGACCATTGCCTGCTTATCTAGGGTCTAAAACATCTGAATCT | |
| M4 L nucl. | GACGTCTTTAGTTCACGGGGACCATTGCCTGCTTATCTAGGGTCTAAAACATCTGAATCT | |
| GenBank L nucl. | 3481 | 3540 |
| HR L nucl. | ACATCTATTTTGCAGCCTTGGGAAAGGGAAAGCAAAGTCCCACTGATTAAAAGAGCTACA | |
| M2 L nucl. | ACATCTATTTTGCAGCCTTGGGAAAGGGAAAGCAAAGTCCCACTGATTAAAAGAGCTACA | |
| M4 L nucl. | ACATCTATTTTGCAGCCTTGGGAAAGGGAAAGCAAAGTCCCACTGATTAAAAGAGCTACA | |
| GenBank L nucl. | 3541 | 3600 |
| HR L nucl. | CGTCTTAGAGATGCTATCTCTTGGTTTGTTGAACCCGACTCTAACTAGCAATGACTATA | |
| M2 L nucl. | CGTCTTAGAGATGCTATCTCTTGGTTTGTTGAACCCGACTCTAACTAGCAATGACTATA | |
| M4 L nucl. | CGTCTTAGAGATGCTATCTCTTGGTTTGTTGAACCCGACTCTAACTAGCAATGACTATA | |
| GenBank L nucl. | 3601 | 3660 |
| HR L nucl. | CTTTCTAACATCCACTCTTTAACAGGCGAAGAATGGACCAAAGGCAGCATGGGTTCAAA | |
| M2 L nucl. | CTTTCTAACATCCACTCTTTAACAGGCGAAGAATGGACCAAAGGCAGCATGGGTTCAAA | |
| M4 L nucl. | CTTTCTAACATCCACTCTTTAACAGGCGAAGAATGGACCAAAGGCAGCATGGGTTCAAA | |

FIGURE 22-7

| | | |
|-----------------|--|------|
| GenBank L nucl. | 3661 | 3720 |
| HR L nucl. | AGAACAGGGTCTGCCCTTCATAGGTTTTTCGACATCTCGGATGAGCCATGGTGGGTTTCGCA | |
| M2 L nucl. | AGAACAGGGTCTGCCCTTCATAGGTTTTTCGACATCTCGGATGAGCCATGGTGGGTTTCGCA | |
| M4 L nucl. | AGAACAGGGTCTGCCCTTCATAGGTTTTTCGACATCTCGGATGAGCCATGGTGGGTTTCGCA | |
| GenBank L nucl. | 3721 | 3780 |
| HR L nucl. | TCTCAGAGCACTGCAGCATTGACCAGGTTGATGGCAACTACAGACACCATGAGGGATCTG | |
| M2 L nucl. | TCTCAGAGCACTGCAGCATTGACCAGGTTGATGGCAACTACAGACACCATGAGGGATCTG | |
| M4 L nucl. | TCTCAGAGCACTGCAGCATTGACCAGGTTGATGGCAACTACAGACACCATGAGGGATCTG | |
| GenBank L nucl. | 3781 | 3840 |
| HR L nucl. | GGAGATCAGAATTTTCGACTTTTTATTCCAAAGCAACGTTGCTCTATGCTCAATTACCACC | |
| M2 L nucl. | GGAGATCAGAATTTTCGACTTTTTATTCCAGGCAACGTTGCTCTATGCTCAATTACCACC | |
| M4 L nucl. | GGAGATCAGAATTTTCGACTTTTTATTCCANNGCAACGTTGCTCTATGCTCANATTACCACC | |
| GenBank L nucl. | 3841 | 3900 |
| HR L nucl. | ACTGTTGCAAGAGACGGATGGATCACCAGTTGTACAGATCATTATCATATTGCCTGTAAG | |
| M2 L nucl. | ACTGTTGCAAGAGACGGATGGATCACCAGTTGTACAGATCATTATCATATTGCCTGTAAG | |
| M4 L nucl. | ACTGTTGCAAGAGACGGATGGATCACCAGTTGTACAGATCATTATCATATTGCCTGTAAG | |
| GenBank L nucl. | 3901 | 3960 |
| HR L nucl. | TCCTGTTTGAGACCCATAGAAGAGATCACCTGGACTCAAGTATGGACTACACGCCCCCA | |
| M2 L nucl. | TCCTGTTTGAGACCCATAGAAGAGATCACCTGGACTCAAGTATGGACTACACGCCCCCA | |
| M4 L nucl. | TCCTGTTTGAGACCCATAGAAGAGATCACCTGGACTCAAGTATGGACTACACGCCCCCA | |
| GenBank L nucl. | 3961 | 4020 |
| HR L nucl. | GATGTATCCCATGTGCTGAAGACATGGAGGAATGGGGAAGGTTCTGTTGGGACAAGAGATA | |
| M2 L nucl. | GATGTATCCCATGTGCTGAAGACATGGAGGAATGGGGAAGGTTCTGTTGGGACAAGAGATA | |
| M4 L nucl. | GATGTATCCCATGTGCTGAAGACATGGAGGAATGGGGAAGGTTCTGTTGGGACAAGAGATA | |
| GenBank L nucl. | 4021 | 4080 |
| HR L nucl. | AAACAGATCTATCCTTTAGAAAGGAATTGGAAGAATTTAGCACCTGCTGAGCAATCCTAT | |
| M2 L nucl. | AAACAGATCTATCCTTTAGAAAGGAATTGGAAGAATTTAGCACCTGCTGAGCAATCCTAT | |
| M4 L nucl. | AAACAGATCTATCCTTTAGAAAGGAATTGGAAGAATTTAGCACCTGCTGAGCAATCCTAT | |
| GenBank L nucl. | 4081 | 4140 |
| HR L nucl. | CAAGTCGGCAGATGTATAGGTTTTCTATATGGAGACTTGGCGTATAGAAAATCTACTCAT | |
| M2 L nucl. | CAAGTCGGCAGATGTATAGGTTTTCTATATGGAGACTTGGCGTATAGAAAATCTACTCAT | |
| M4 L nucl. | CAAGTCGGCAGATGTATAGGTTTTCTATATGGAGACTTGGCGTATAGAAAATCTACTCAT | |
| GenBank L nucl. | 4141 | 4200 |
| HR L nucl. | GCCGAGGACAGTTCTCTATTTCTCTATCTATACAAGGTCGTATTAGAGGTCGAGGTTTC | |
| M2 L nucl. | GCCGAGGACAGTTCTCTATTTCTCTATCTATACAAGGTCGTATTAGAGGTCGAGGTTTC | |
| M4 L nucl. | GCCGAGGACAGTTCTCTATTTCTCTATCTATACAAGGTCGTATTAGAGGTCGAGGTTTC | |

FIGURE 22-8

| | | |
|-----------------|---|------|
| GenBank L nucl. | 4201 | 4260 |
| HR L nucl. | TTAAAAGGGTTGCTAGACGGATTAATGAGAGCAAGTTGCTGCCAAGTAATACACCGGAGA | |
| M2 L nucl. | TTAAAAGGGTTGCTAGACGGATTAATGAGAGCAAGTTGCTGCCAAGTAATACACCGGAGA | |
| M4 L nucl. | TTAAAAGGGTTGCTAGACGGATTAATGAGAGCAAGTTGCTGCCAAGTAATACACCGGAGA | |
| GenBank L nucl. | 4261 | 4320 |
| HR L nucl. | AGTCTGGCTCATTTGAAGAGGCCGGCCAACGCAGTGTACGGAGGTTTGATTTACTTGATT | |
| M2 L nucl. | AGTCTGGCTCATTTGAAGAGGCCGGCCAACGCAGTGTACGGAGGTTTGATTTACTTGATT | |
| M4 L nucl. | AGTCTGGCTCATTTGAAGAGGCCGGCCAACGCAGTGTACGGAGGTTTGATTTACTTGATT | |
| GenBank L nucl. | 4321 | 4380 |
| HR L nucl. | GATAAATTGAGTGTATCACCTCCATTCTCTTCTTACTAGATCAGGACCTATTAGAGAC | |
| M2 L nucl. | GATAAATTGAGTGTATCACCTCCATTCTCTTCTTACTAGATCAGGACCTATTAGAGAC | |
| M4 L nucl. | GATAAATTGAGTGTATCACCTCCATTCTCTTCTTACTAGATCAGGACCTATTAGAGAC | |
| GenBank L nucl. | 4381 | 4440 |
| HR L nucl. | GAATTAGAAACGATTCCCCACAAGATCCCAACCTCCTATCCGACAAGCAACCGTGATATG | |
| M2 L nucl. | GAATTAGAAACGATTCCCCACAAGATCCCAACCTCCTATCCGACAAGCAACCGTGATATG | |
| M4 L nucl. | GAATTAGAAACGATTCCCCACAAGATCCCAACCTCCTATCCGACAAGCAACCGTGATATG | |
| GenBank L nucl. | 4441 | 4500 |
| HR L nucl. | GGGGTGATTGTCAGAAATTACTTCAAATACCAATGCCGTCTAATTGAAAAGGGAAAATAC | |
| M2 L nucl. | GGGGTGATTGTCAGAAATTACTTCAAATACCAATGCCGTCTAATTGAAAAGGGAAAATAC | |
| M4 L nucl. | GGGGTGATTGTCAGAAATTACTTCAAATACCAATGCCGTCTAATTGAAAAGGGAAAATAC | |
| GenBank L nucl. | 4501 | 4560 |
| HR L nucl. | AGATCACATTATTTCACAATTATGGTTATTCTCAGATGTCTTATCCATAGACTTCATTGGA | |
| M2 L nucl. | AGATCACATTATTTCACAATTATGGTTATTCTCAGATGTCTTATCCATAGACTTCATTGGA | |
| M4 L nucl. | AGATCACATTATTTCACAATTATGGTTATTCTCAGATGTCTTATCCATAGACTTCATTGGA | |
| GenBank L nucl. | 4561 | 4620 |
| HR L nucl. | CCATTCTCTATTTCCACCACCCTCTTGCAAATCCTATACAAGCCATTTTTATCTGGGAAA | |
| M2 L nucl. | CCATTCTCTATTTCCACCACCCTCTTGCAAATCCTATACAAGCCATTTTTATCTGGGAAA | |
| M4 L nucl. | CCATTCTCTATTTCCACCACCCTCTTGCAAATCCTATACAAGCCATTTTTATCTGGGAAA | |
| GenBank L nucl. | 4621 | 4680 |
| HR L nucl. | GATAAGAATGAGTTGAGAGAGCTGGCAAATCTTTCTTCATTGCTAAGATCAGGAGAGGGG | |
| M2 L nucl. | GATAAGAATGAGTTGAGAGAGCTGGCAAATCTTTCTTCATTGCTAAGATCAGGAGAGGGG | |
| M4 L nucl. | GATAAGAATGAGTTGAGAGAGCTGGCAAATCTTTCTTCATTGCTAAGATCAGGAGAGGGG | |
| GenBank L nucl. | 4681 | 4740 |
| HR L nucl. | TGGGAAGACATACATGTGAAATTCTTCACCAAGGACATATTATTGTGTCCAGAGGAAATC | |
| M2 L nucl. | TGGGAAGACATACATGTGAAATTCTTCACCAAGGACATATTATTGTGTCCAGAGGAAATC | |
| M4 L nucl. | TGGGAAGACATACATGTGAAATTCTTCACCAAGGACATATTATTGTGTCCAGAGGAAATC | |

FIGURE 22-9

| | | |
|-----------------|---|------|
| | 4741 | 4800 |
| GenBank L nucl. | AGACATGCTTGCAAGTTCGGGATTGCTAAGGATAATAATAAAGACATGAGCTATCCCCCT | |
| HR L nucl. | AGACATGCTTGCAAGTTCGGGATTGCTAAGGATAATAATAAAGACATGAGCTATCCCCCT | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | AGACATGCTTGCAAGTTCGGGATTGCTAAGGATAATAATAAAGACATGAGCTATCCCCCT | |
| | 4801 | 4860 |
| GenBank L nucl. | TGGGGAAGGGAATCCAGAGGGACAATTACAACAATCCCTGTTTATTATACGACCACCCCT | |
| HR L nucl. | TGGGGAAGGGAATCCAGAGGGACAATTACAACAATCCCTGTTTATTATACGACCACCCCT | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | TGGGGAAGGGAATCCAGAGGGACAATTACAACAATCCCTGTTTATTATACGACCACCCCT | |
| | 4861 | 4920 |
| GenBank L nucl. | TACCCAAAGATGCTAGAGATGCCTCCAAGAATCCAAAATCCCCTGCTGTCCGGAATCAGG | |
| HR L nucl. | TACCCAAAGATGCTAGAGATGCCTCCAAGAATCCAAAATCCCCTGCTGTCCGGAATCAGG | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | TACCCAAAGATGCTAGAGATGCCTCCAAGAATCCAAAATCCCCTGCTGTCCGGAATCAGG | |
| | 4921 | 4980 |
| GenBank L nucl. | TTGGGCCCAATTACCAACTGGCGCTCATTATAAAATTCGGAGTATATTACATGGAATGGGA | |
| HR L nucl. | TTGGGCCCAGTTACCAACTGGCGCTCATTATAAAATTCGGAGTATATTACATGGAATGGGA | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | TTGGGCCCAGTTACCAACTGGCGCTCATTATAAAATTCGGAGTATATTACATGGAATGGGA | |
| | 4981 | 5040 |
| GenBank L nucl. | ATCCATTACAGGGACTTCTTGAGTTGTGGAGACGGCTCCGGAGGGATGACTGCTGCATTA | |
| HR L nucl. | ATCCATTACAGGGACTTCTTGAGTTGTGGAGACGGCTCCGGAGGGATGACTGCTGCATTA | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | ATCCATTACAGGGACTTCTTGAGTTGTGGAGACGGCTCCGGAGGGATGACTGCTGCATTA | |
| | 5041 | 5100 |
| GenBank L nucl. | CTACGAGAAAAATGTGCATAGCAGAGGAATATTCAATAGTCTGTTAGAATTATCAGGGTCA | |
| HR L nucl. | CTACGAGAAAAATGTGCATAGCAGAGGAATATTCAATAGTCTGTTAGAATTATCAGGGTCA | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | CTACGAGAAAAATGTGCATAGCAGAGGAATATTCAATAGTCTGTTAGAATTATCAGGGTCA | |
| | 5101 | 5160 |
| GenBank L nucl. | GTCATGCGAGGCGCCTCTCCTGAGCCCCCAGTGCCCTAGAACTTTAGGAGGAGATAAA | |
| HR L nucl. | GTCATGCGAGGCGCCTCTCCTGAGCCCCCAGTGCCCTAGAACTTTAGGAGGAGATAAA | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | GTCATGCGAGGCGCCTCTCCTGAGCCCCCAGTGCCCTAGAACTTTAGGAGGAGATAAA | |
| | 5161 | 5220 |
| GenBank L nucl. | TCGAGATGTGTAAATGGTGAAACATGTTGGGAATATCCATCTGACTTATGTGACCCAAGG | |
| HR L nucl. | TCGAGATGTGTAAATGGTGAAACATGTTGGGAATATCCATCTGACTTATGTGACCCAAGG | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | TCGAGATGTGTAAATGGTGAAACATGTTGGGAATATCCATCTGACTTATGTGACCCAAGG | |
| | 5221 | 5280 |
| GenBank L nucl. | ACTTGGGACTATTTCCCTCCGACTCAAAGCAGGCTTGGGGCTTCAAATTGATTTAATTGTA | |
| HR L nucl. | ACTTGGGACTATTTCCCTCCGACTCAAAGCAGGCTTGGGGCTTCAAATTGATTTAATTGTA | |
| M2 L nucl. | ..... |  |
| M4 L nucl. | ACTTGGGACTATTTCCCTCCGACTCAAAGCAGGCTTGGGGCTTCAAATTGATTTAATTGTA | |

FIGURE 22-10

| | | |
|-----------------|--|------|
| GenBank L nucl. | 5281 | 5340 |
| HR L nucl. | ATGGATATGGAAGTTCGGGATTCTTCTACTAGCCTGAAAATTGAGACGAATGTTAGAAAT | |
| M2 L nucl. | ATGGATATGGAAGTTCGGGATTCTTCTACTAGCCTGAAAATTGAGACGAATGTTAGAAAT | |
| M4 L nucl. | ..... |  |
| | ATGGATATGGAAGTTCGGGATTCTTCTACTAGCCTGAAAATTGAGACGAATGTTAGAAAT | |
| GenBank L nucl. | 5341 | 5400 |
| HR L nucl. | TATGTGCACCGGATTTTGGATGAGCAAGGAGTTTAACTACAAGACTTATGGAACATAT | |
| M2 L nucl. | TATGTGCACCGGATTTTGGATGAGCAAGGAGTTTAACTACAAGACTTATGGAACATAT | |
| M4 L nucl. | ..... |  |
| | TATGTGCACCGGATTTTGGATGAGCAAGGAGTTTAACTACAAGACTTATGGAACATAT | |
| GenBank L nucl. | 5401 | 5460 |
| HR L nucl. | ATTTGTGAGAGCGAAAAGAATGCAGTAACAATCCTTGGTCCCATGTTCAAGACGGTCGAC | |
| M2 L nucl. | ATTTGTGAGAGCGAAAAGAATGCAGTAACAATCCTTGGTCCCATGTTCAAGACGGTCGAC | |
| M4 L nucl. | ..... |  |
| | ATTTGTGAGAGCGAAAAGAATGCAGTAACAATCCTTGGTCCCATGTTCAAGACGGTCGAC | |
| GenBank L nucl. | 5461 | 5520 |
| HR L nucl. | TTAGTTCAAACAGAATTTAGTAGTTCTCAAACGTCTGAAGTATATATGGTATGTAAAGGT | |
| M2 L nucl. | TTAGTTCAAACAGAATTTAGTAGTTCTCAAACGTCTGAAGTATATATGGTATGTAAAGGT | |
| M4 L nucl. | ..... |  |
| | TTAGTTCAAACAGAATTTAGTAGTTCTCAAACGTCTGAAGTATATATGGTATGTAAAGGT | |
| GenBank L nucl. | 5521 | 5580 |
| HR L nucl. | TTGAAGAAATTAATCGATGAACCCAATCCCGATTGGTCTTCCATCAATGAATCCTGGAAA | |
| M2 L nucl. | TTGAAGAAATTAATCGATGAACCCAATCCCGATTGGTCTTCCATCAATGAATCCTGGAAA | |
| M4 L nucl. | ..... |  |
| | TTGAAGAAATTAATCGATGAACCCAATCCCGATTGGTCTTCCATCAATGAATCCTGGAAA | |
| GenBank L nucl. | 5581 | 5640 |
| HR L nucl. | AACCTGTACGCATTCCAGTCATCAGAACAGGAATTTGCCAGAGCAAAGAAGGTTAGTACA | |
| M2 L nucl. | AACCTGTACGCATTCCAGTCATCAGAACAGGAATTTGCCAGAGCAAAGAAGGTTAGTACA | |
| M4 L nucl. | ..... |  |
| | AACCTGTACGCATTCCAGTCATCAGAACAGGAATTTGCCAGAGCAAAGAAGGTTAGTACA | |
| GenBank L nucl. | 5641 | 5700 |
| HR L nucl. | TACTTTACCTTGACAGGTATTCCCTCCCAATTCATTCTGATCCTTTTGTGAACATTGAG | |
| M2 L nucl. | TACTTTACCTTGACAGGTATTCCCTCCCAATTCATTCTGATCCTTTTGTGAACATTGAG | |
| M4 L nucl. | ..... |  |
| | TACTTTACCTTGACAGGTATTCCCTCCCAATTCATTCTGATCCTTTTGTGAACATTGAG | |
| GenBank L nucl. | 5701 | 5760 |
| HR L nucl. | ACTATGCTACAAATATTTCGGAGTACCCACGGGTGTGTCTCATGCGGCTGCCTTAAATCA | |
| M2 L nucl. | ACTATGCTACAAATATTTCGGAGTACCCACGGGTGTGTCTCATGCGGCTGCCTTAAATCA | |
| M4 L nucl. | ..... |  |
| | ACTATGCTACAAATATTTCGGAGTACCCACGGGTGTGTCTCATGCGGCTGCCTTAAATCA | |
| GenBank L nucl. | 5761 | 5820 |
| HR L nucl. | TCTGATAGACCTGCAGATTTATTGACCATTAGCCTTTTTTATATGGCGATTATATCGTAT | |
| M2 L nucl. | TCTGATAGACCTGCAGATTTATTGACCATTAGCCTTTTTTATATGGCGATTATATCGTAT | |
| M4 L nucl. | ..... |  |
| | TCTGATAGACCTGCAGATTTATTGACCATTAGCCTTTTTTATATGGCGATTATATCGTAT | |

FIGURE 22-11

| | | | |
|-----------|------|---|-----|
| GenBank L | a.a. | 1 | 60 |
| HR L a.a. | | MEVHDFETDEFNDFNEDDYATREFLNPDERTYLNHADYNLNSPLISDDIDNLIRKFNSL | |
| M4 L a.a. | | MEVHDFETDEFNDFNEDDYATREFLNPDERTYLNHADYNLNSPLISDDIDNLIRKFNSL | |
| GenBank L | a.a. | 61 | 120 |
| HR L a.a. | | PIPSMWDSKNWDGVLEMLTSCQANPISTSQMHKWMGSWLMSDNHDASQGYSFLHEVDKEA | |
| M4 L a.a. | | PIPSMWDSKNWDGVLEMLTSCQANPISTSQMHKWMGSWLMSDNHDASQGYSFLHEVDKEA | |
| GenBank L | a.a. | 121 | 180 |
| HR L a.a. | | EITFDVVETFIRGWGNKPIEYIKKERWTDSFKILAYLCQKFLDLHKLTLILNAVSEVELL | |
| M4 L a.a. | | EITFDVVETFIRGWGNKPIEYIKKERWTDSFKILAYLCQKFLDLHKLTLILNAVSEVELL | |
| GenBank L | a.a. | 181 | 240 |
| HR L a.a. | | NLARTFKGKVRSSSHGTNICRIRVPSLGPTFISEGWAYFKKLDILMDRNFLLMVKDVIIG | |
| M4 L a.a. | | NLARTFKGKVRSSSHGTNICRIRVPSLGPTFISEGWAYFKKLDILMDRNFLLMVKDVIIG | |
| GenBank L | a.a. | 241 | 300 |
| HR L a.a. | | RMQTVLSMVCRIDNLFSEQDIFSLLNIIYRIGDKIVERQGNFSYDLIKMVEPICNLKLMKL | |
| M4 L a.a. | | RMQTVLSMVCRIDNLFSEQDIFSLLNIIYRIGDKIVERQGNFSYDLIKMVEPICNLKLMKL | |
| GenBank L | a.a. | 301 | 360 |
| HR L a.a. | | ARESRLVPQFPHFENHIKTSVDEGAkidRGIRFLHDQIMSVKTVDLTLVIYGSFRHWGH | |
| M4 L a.a. | | ARESRLVPQFPHFENHIKTSVDEGAkidRGIRFLHDQIMSVKTVDLTLVIYGSFRHWGH | |
| GenBank L | a.a. | 361 | 420 |
| HR L a.a. | | PFIDYYIGLEKLHSQVTMKKDIDVSYAKALASDLARIVLFQQFNDHKKWVFVNGDLLPHDH | |
| M4_L.pro | | PFIDYYAGLEKLHSQVTMKKDIDVSYAKALASDLARIVLFQQFNDHKKWVFVNGDLLPHDH | |
| GenBank L | a.a. | 421 | 480 |
| HR L a.a. | | PFKSHVKENTWPTAAQVQDFGDKWHELPLIKCFEIPDLLDPSIIYSDKSHSMNRSEVLKH | |
| M4 L a.a. | | PFKSHVKENTWPTAAQVQDFGDKWHELPLIKCFEIPDLLDPSIIYSDKSHSMNRSEVLKH | |
| GenBank L | a.a. | 481 | 540 |
| HR L a.a. | | VRMNPNTPIPSKKVLQTMLDTKATNWKEFLKEIDEKGLDDDDLIIGLKGKERELKLAGRF | |
| M4 L a.a. | | VRMNPNTPIPSKKVLQTMLDTKATNWKEFLKEIDEKGLDDDDLIIGLKGKERELKLAGRF | |
| GenBank L | a.a. | 541 | 600 |
| HR L a.a. | | FSLMSWKLREYFVITEYLIKTHFVPMFKGLTMADDLTAVIKKMLDSSSGQGLKSYEAICI | |
| M4 L a.a. | | FSLMSWKLREYFVITEYLIKTHFVPMFKGLTMADDLTAVIKKMLDSSSGQGLKSYEAICI | |

FIGURE 23-1

| | | | |
|-----------|------|---|------|
| GenBank L | a.a. | 601 | 660 |
| HR L a.a. | | ANHIDYEKWNHQRKLSNGPVFRVMGQFLGYPSLIERTHEFFEKSIIYYNGRPDLMRVHN | |
| M4 L a.a. | | ANHIDYEKWNHQRKLSNGPVFRVMGQFLGYPSLIERTHEFFEKSIIYYNGRPDLMRVHN | |
| GenBank L | a.a. | 661 | 720 |
| HR L a.a. | | NTLINSTSQRVCWQGQEGGLEGLRQKGWILNLLVIQREAKIRNTAVKVLAQGDNQVICT | |
| M4 L a.a. | | NTLINSTSQRVCWQGQEGGLEGLRQKGWSILNLLVIQREAKIRNTAVKVLAQGDNQVICT | |
| GenBank L | a.a. | 721 | 780 |
| HR L a.a. | | QYKTKKSRNVVELQGALNQMVSNNEKIMTAIKIGTGKLGLLINDETMQSADYLNYGKIP | |
| M4 L a.a. | | QYKTKKSRNVVELQGALNQMVSNNEKIMTAIKIGTGKLGLLINDETMQSADYLNYGKIP | |
| GenBank L | a.a. | 781 | 840 |
| HR L a.a. | | IFRGVIRGLETKRWSRVTCVTNDQIPTCANIMSSVSTNALTVAHFAENPINAMIQYNYFG | |
| M4 L a.a. | | IFRGVIRGLETKRWSRVTCVTNDQIPTCANIMSSVSTNALTVAHFAENPINAMIQYNYFG | |
| GenBank L | a.a. | 841 | 900 |
| HR L a.a. | | TFARLLLMMHDPALRQSLYEVQDKIPGLHSSTFKYAMLYLDPSIGGVSGMSLSRFLIRAF | |
| M4 L a.a. | | TFARLLLMMHDPALRQSLYEVQDKIPGLHSSTFKYAMLYLDPSIGGVSGMSLSRFLIRAF | |
| GenBank L | a.a. | 901 | 960 |
| HR L a.a. | | PDPVTESLSFWRFIHVHARSEHLKEMSAVFGNPEIAKFRITHIDKLVEDPTSLNIAMGMS | |
| M4 L a.a. | | PDPVTESLSFWRFIHVHARSEHLKEMSAVFGNPEIAKFRITHIDKLVEDPTSLNIAMGMS | |
| GenBank L | a.a. | 961 | 1020 |
| HR L a.a. | | PANLLKTEVKKCLIESRQTIRNQVIKDATIYLYHEEDRLRSFLWSINPLFPRFLSEFKSG | |
| M4 L a.a. | | PANLLKTEVKKCLIESRQTIRNQVIKDATIYLYHEEDRLRSFLWSINPLFPRFLSEFKSG | |
| GenBank L | a.a. | 1021 | 1080 |
| HR L a.a. | | TFLGVADGLISLFQNSRTIRNSFKKKYHREDDLIVRSEVSSLTHLGKLHLRRGSKMWT | |
| M4 L a.a. | | TFLGVADGLISLFQNSRTIRNSFKKKYHREDDLIVRSEVSSLTHLGKLHLRRGSKMWT | |
| GenBank L | a.a. | 1081 | 1140 |
| HR L a.a. | | CSATHADTLRYKSWGRTVIGTTVPHPLEMLGPQHRKETPCAPCNTSGFNYVSVHCPDGIH | |
| M4 L a.a. | | CSATHADTLRYKSWGRTVIGTTVPHPLEMLGPQHRKETPCAPCNTSGFNYVSVHCPDGIH | |
| GenBank L | a.a. | 1141 | 1200 |
| HR L a.a. | | DVFSSRGPLPAYLGSKTSESTSILQPWERESKVPLIKRATRLRDAISWFVEPD SKLAMTI | |
| M4 L a.a. | | DVFSSRGPLPAYLGSKTSESTSILQPWERESKVPLIKRATRLRDAISWFVEPD SKLAMTI | |

FIGURE 23-2

| | | | |
|-----------|------|---|------|
| GenBank L | a.a. | 1201 | 1260 |
| HR L a.a. | | LSNIHSLTGEIEWTKRQHGFKRTGSALHRFSTSRMSHGGFASQSTAALTRLMATTDTRDL | |
| M4 L a.a. | | LSNIHSLTGEIEWTKRQHGFKRTGSALHRFSTSRMSHGGFASQSTAALTRLMATTDTRDL | |
| GenBank L | a.a. | 1261 | 1320 |
| HR L a.a. | | GDQNFDFLFQATLLYAQITTTVARDGWITSCTDHYHIACKSCLRPIEEITLDSSMDYTPP | |
| M4 L a.a. | | GDQNFDFLFQATLLYAQITTTVARDGWITSCTDHYHIACKSCLRPIEEITLDSSMDYTPP | |
| GenBank L | a.a. | 1321 | 1380 |
| HR L a.a. | | DVSHVLKTRWRNGEGSWGQEIQIYPLEGNWKNLAPAEQSYQVGRICIGFLYGDLAYRKSTH | |
| M4 L a.a. | | DVSHVLKTRWRNGEGSWGQEIQIYPLEGNWKNLAPAEQSYQVGRICIGFLYGDLAYRKSTH | |
| GenBank L | a.a. | 1381 | 1440 |
| HR L a.a. | | AEDSSLFPLSIQGRIRGRGFLKGLLDGLMRASCCQVIHRRSLAHLKR PANAVYGG LIYLI | |
| M4 L a.a. | | AEDSSLFPLSIQGRIRGRGFLKGLLDGLMRASCCQVIHRRSLAHLKR PANAVYGG LIYLI | |
| GenBank L | a.a. | 1441 | 1500 |
| HR L a.a. | | DKLSVSPFPLSLTRSGPIRDELETIPHKIPTSYPTSNRDMGVIVRNYFKYQCRLIEKGKY | |
| M4 L a.a. | | DKLSVSPFPLSLTRSGPIRDELETIPHKIPTSYPTSNRDMGVIVRNYFKYQCRLIEKGKY | |
| GenBank L | a.a. | 1501 | 1560 |
| HR L a.a. | | RSHYSQLWLFSDVLSIDFIGPFSISTTLLQILYKPFLSGDKKNELRELANLSSLLRSSEG | |
| M4 L a.a. | | RSHYSQLWLFSDVLSIDFIGPFSISTTLLQILYKPFLSGDKKNELRELANLSSLLRSSEG | |
| GenBank L | a.a. | 1561 | 1620 |
| HR L a.a. | | WEDIHVKFFTKDILLCP E EIRHACKFGIAKDNNK DMSYPPWGRESRG TITTI PVYYTTTP | |
| M4 L a.a. | | WEDIHVKFFTKDILLCP E EIRHACKFGIAKDNNK DMSYPPWGRESRG TITTI PVYYTTTP | |
| GenBank L | a.a. | 1621 | 1680 |
| HR L a.a. | | YPKMLEMPPRIQNPLLSGIRLGQLPTGAHYKIRSILHGMGIHYRDFLSCGDGSGGMTAAL | |
| M4 L a.a. | | YPKMLEMPPRIQNPLLSGIRLGQLPTGAHYKIRSILHGMGIHYRDFLSCGDGSGGMTAAL | |
| GenBank L | a.a. | 1681 | 1740 |
| HR L a.a. | | LRENVHSRGIFNSLLELSGSVMRGASPEPPSALET LGGDKSRCVNGETCWEYPSDLC DPR | |
| M4 L a.a. | | LRENVHSRGIFNSLLELSGSVMRGASPEPPSALET LGGDKSRCVNGETCWEYPSDLC DPR | |
| GenBank L | a.a. | 1741 | 1800 |
| HR L a.a. | | TWDYFLRLKAGLGLQIDLIVMDMEVRDSSTSLKIETNVRNYVHRILDEQGVLIYKTYGTY | |
| M4 L a.a. | | TWDYFLRLKAGLGLQIDLIVMDMEVRDSSTSLKIETNVRNYVHRILDEQGVLIYKTYGTY | |
| GenBank L | a.a. | 1801 | 1860 |
| HR L a.a. | | ICESEKNAV TILGPMFKTVDLVQTEFSSSQ TSEVY MVCKGLKKL IDEPNPDWSSINESWK | |
| M4 L a.a. | | ICESEKNAV TILGPMFKTVDLVQTEFSSSQ TSEVY MVCKGLKKL IDEPNPDWSSINESWK | |

FIGURE 23-3

| | | | |
|-----------|------|--|------|
| GenBank L | a.a. | 1861 | 1920 |
| HR L | a.a. | NLYAFQSSEQEFARAKKVSTYFTLTGIPSQFIPDPFVNIETMLQIFGVPTGVSHAAALKS | |
| M4 L | a.a. | NLYAFQSSEQEFARAKKVSTYFTLTGIPSQFIPDPFVNIETMLQIFGVPTGVSHAAALKS | |
| GenBank L | a.a. | 1921 | 1980 |
| HR L | a.a. | SDRPADLLTISLFYMAIISYYNINHIRVGPIPPNPPSDGIAQNVGIAITGISFWLSLMEK | |
| M4 L | a.a. | SDRPADLLTISLFYMAIISYYNINHIRVGPIPPNPPSDGIAQNVGIAITGISFWLSLMEK | |
| GenBank L | a.a. | 1981 | 2040 |
| HR L | a.a. | DIPLYQQCLAVIQQSFPIRWEAVSVKGGYKQKWSTRGDGLPKDTRISDSLAPIGNWIRSL | |
| M4 L | a.a. | DIPLYQQCLAVIQQSFPIRWEAVSVKGGYKQKWSTRGDGLPKDTRISDSLAPIGNWIRSL | |
| GenBank L | a.a. | 2041 | 2100 |
| HR L | a.a. | ELVRNQVRLNPFNEILFNQLCRTVDNHLKWSNLRKNTGMIEWINRRISKEDRSILMLKSD | |
| M4 L | a.a. | ELVRNQVRLNPFNEILFNQLCRTVDNHLKWSNLRKNTGMIEWINRRISKEDRSILMLKSD | |
| GenBank L | a.a. | 2101 | 2110 |
| HR L | a.a. | LHEENSWRD | |
| M4 L | a.a. | LHEENSWRD | |

FIGURE 23-4